



## **CONTACT INFORMATION**

Mining Records Curator  
Arizona Geological Survey  
1520 West Adams St.  
Phoenix, AZ 85007  
602-771-1601  
<http://www.azgs.az.gov>  
[inquiries@azgs.az.gov](mailto:inquiries@azgs.az.gov)

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BAGDAD YAVAPAI COUNTY MILS119B FILE 3 OF 8  
COMPANY INFORMATION tmm 12/05/2002

# Bagdad Copper Corporation Mining Expansion Objective

March 1969

RECEIVED  
GEOX  
BAGDAD, ARIZONA



REC'D MAR 29 1969

BOX 5671 TUCSON, ARIZONA 85703

Phone: (AREA 602) 623-0578

## 1. Introduction

Bagdad Copper Corporation desires to expand its copper mining and also diversify its mining base to other minerals. Most of our past effort in this connection has been investigation of unproven prospects. We will still look at these. However, during the coming year we will add the possibility of acquiring existing and operating mines, and emphasis during the coming year will be on acquisition rather than exploration of unproven prospects. I would like to make a point about unproven prospects and copper before discussing acquisitions.

## 2. Unproven Prospects

When looking for unproven prospects, we will consider almost any mineral, but the ones of most interest to us are copper, molybdenum, and sulfur. Again I will state that emphasis during the coming year will be on acquisitions rather than the unproven prospects.

## 3. Copper

Copper, of course, is a unique situation for Bagdad and the mineral of most interest to us. The most promising prospect for copper is possible development of low grade material adjacent to our present ore body. Consequently, emphasis on copper exploration in the future will shift "back home." This by no means excludes exploration elsewhere. There is a special situation with regard to copper that makes it desirable for Bagdad to acquire a leaching operation capable of producing limited quantities of cement copper and located sufficiently close to Bagdad so that the cement could be shipped to Bagdad for refining.

## 4. Acquisition of Existing Mines

If we acquire existing mines, we cannot be as selective concerning type of mineral as when investigating unproven prospects. Nor is selectivity as necessary. As a practical matter, the mineral in an operating mine to be acquired is not as important as the market for that mineral and the operating condition of the mine. Some general criteria for acquisition can be established. These criteria are goals and certainly all need not be met before a possible acquisition will be considered.

(1) The mine should have some operating history and some blocked out ore reserve or show excellent potential for future reserves.

(2) Acquisitions for cash are most desirable but stock, debentures, or combinations are also possible. Larger acquisitions are more apt to require the more complex methods. Bagdad should emerge in unquestioned control of all operations after any acquisition.

(3) If the mine is presently small or unprofitable, it should be quite clear that additional resources of money and management can make the mine profitable and large enough to be meaningful. This would mean a minimum of \$150,000 per year after tax profit.

Return on investment should be at least 15% per year after taxes, taking into account the need to write off the investment over a period no longer than expected life of the ore body.

Applying the above criteria gives a minimum size acquisition of about \$1,000,000 after buying the mine and paying capital cost of whatever new facilities are needed. Maximum size probably should not exceed \$5,000,000 because of the possible financial burden.

(4) It is most desirable to have the acquired mine as close to our present operation as possible, but this is not a limiting factor. Arizona and immediate vicinity would be best. Anywhere in the United States west of the Rocky Mountains would be good. Other parts of the United States are acceptable, as are foreign mines. If possible, it should be in a country that is favorable to United States business.

In general the more remote from Arizona an acquired mine is, the bigger it should be to justify establishing the complete satellite organization required.

(5) Exact type of mineral is not too important.

(6) Marketing of the mine output should not be a problem. Preferably the mineral should be salable in a general commodity market such that if one has the product at a standard market specification, then it can be easily sold through mineral brokerage channels (or to specific end users if we so elected).

If the mineral has no general commodity market, it is still possible that marketing could be easily accomplished because of unique conditions of the mineral being produced or by contractual arrangement with specific customers.

Prime examples of minerals with good markets are copper, silver, platinum, oil, sulfur, plus many others.

(7) Mining methods should make use of present talent within our Company. These talents include mining (primarily open pit but also underground), milling and ore processing, leaching, hydro-metallurgy, powder metal handling, management of remove operations including extensive maintenance, and steel fabrication.

Prime examples of minerals that are most satisfactory from talent standpoint are copper, molybdenum, uranium, surface sulfur, some coal, probably many lead and zinc operations, and probably a number of non-metallic operations such as phosphate.

David C. Lincoln  
Bagdad Copper Corporation  
55 East Thomas Road  
Phoenix, Arizona 85012  
602-279-3060



# Consolidated Statement Of Income And Retained Earnings

FOR THE YEARS ENDED DECEMBER 31, 1968 AND 1967

	December 31	
	1968	1967
<b>INCOME:</b>		
Sales of basic metals (Note 7)	\$16,111,935	\$13,379,506
Sales of manufactured products (Note 7)	5,098,904	4,437,057
Interest and other income	229,523	185,609
	<u>21,440,362</u>	<u>18,002,172</u>
<b>COSTS AND EXPENSES:</b>		
Cost of basic metals sold	7,453,988	6,412,048
Cost of manufactured products sold	4,061,856	3,570,940
Selling, general and administrative expenses	3,218,530	2,771,986
Depreciation, depletion and amortization, including \$324,704 amortization of prior years' mine development costs (Notes 3 and 5)	1,285,677	1,189,332
Joint venture loss (Note 4)	272,272	505,759
Estimated income taxes (Note 9)	1,750,000	1,020,000
	<u>18,042,323</u>	<u>15,470,065</u>
<b>NET INCOME</b> (\$2.51 and \$1.90 per share of stock outstanding adjusted for stock dividend) (Notes 3 and 6)	3,398,039	2,532,107
<b>RETAINED EARNINGS</b> beginning of year	12,505,550	10,384,548
Less: Cash dividends (\$.22½ declared in 1968— \$.30 paid in 1968 and \$.25 in 1967— Note 6)	(288,373)	(411,105)
5% Stock dividend	(1,500,522)	
Cash for fractional shares	<u>(12,306)</u>	
<b>RETAINED EARNINGS</b> end of year	<u>\$14,102,388</u>	<u>\$12,505,550</u>



# Consolidated Balance Sheet

DECEMBER 31, 1968 AND 1967

## ASSETS

	December 31	
	1968	1967
<b>CURRENT ASSETS:</b>		
Cash	\$ 6,957,196	\$ 650,727
Accounts receivable, less allowance for doubtful accounts of \$46,693 (\$33,055 in 1967)	3,019,487	5,447,200
Inventories (Note 2)	2,210,131	2,242,931
Supplies, at cost	1,357,760	1,234,575
Prepaid expenses	92,479	90,629
Total current assets	<u>13,637,053</u>	<u>9,666,062</u>
<b>DEFERRED CHARGES AND OTHER ASSETS (Note 3):</b>		
Mine development, less amortization	974,112	1,298,817
Excess cost of stock of subsidiary over book value of assets acquired	772,072	736,504
Patents and trademarks, less amortization	290,485	424,555
Cash surrender value of life insurance	277,079	233,177
Other	338,087	202,933
	<u>2,651,835</u>	<u>2,895,986</u>
<b>INVESTMENTS (Note 4)</b>	<u>1,558,975</u>	<u>1,610,549</u>
<b>PROPERTY, PLANT AND EQUIPMENT, net (Note 5):</b>		
Buildings, machinery and equipment, less accumulated depreciation	5,549,428	5,247,967
Mining properties and land, less accumulated depletion	529,803	459,605
	<u>6,079,231</u>	<u>5,707,572</u>
	<u>\$23,927,094</u>	<u>\$19,880,169</u>

## LIABILITIES AND STOCKHOLDERS' EQUITY

	December 31	
	1968	1967
<b>CURRENT LIABILITIES:</b>		
Accounts payable and accrued expenses	\$ 1,051,138	\$ 1,139,647
Notes payable	674,563	325,837
Dividend payable		94,978
Taxes on income (Note 9)	1,078,561	326,310
Other taxes	408,981	443,864
Total current liabilities	<u>3,213,243</u>	<u>2,330,636</u>
 <b>LONG-TERM DEBT:</b>		
6% mortgage note payable, less current portion		<u>23,261</u>
 <b>STOCKHOLDERS' EQUITY</b> (Note 6):		
Capital stock — authorized 4,800,000 shares of \$2.50 par value — 1,351,365 shares outstanding (1,266,373 in 1967)	3,378,412	3,165,932
Other paid-in capital	3,233,051	1,854,790
Retained earnings per accompanying statement	14,102,388	12,505,550
	<u>20,713,851</u>	<u>17,526,272</u>
	<u>\$23,927,094</u>	<u>\$19,880,169</u>



# Consolidated Statement Of Source And Application Of Funds

FOR THE YEARS ENDED DECEMBER 31, 1968 AND 1967

	December 31	
	1968	1967
<b>FUNDS PROVIDED:</b>		
Net income	\$3,398,039	\$2,532,107
Depreciation, depletion and amortization	1,285,677	1,189,332
	<u>4,683,716</u>	<u>3,721,439</u>
 <b>FUNDS APPLIED:</b>		
Additions to property, plant and equipment (Net)	1,198,561	1,736,333
Patents and trademarks acquired		558,625
Cash dividends and payments for fractional shares	300,679	411,105
Investments in other companies, less losses of joint venture	(16,006)	624,940
Other, net	112,098	45,241
	<u>1,595,332</u>	<u>3,376,244</u>
Increase in working capital	<u>\$3,088,384</u>	<u>\$ 345,195</u>
 <b>WORKING CAPITAL:</b>		
End of year	\$10,423,810	\$7,335,426
Beginning of year	7,335,426	6,990,231
Increase	<u>\$ 3,088,384</u>	<u>\$ 345,195</u>

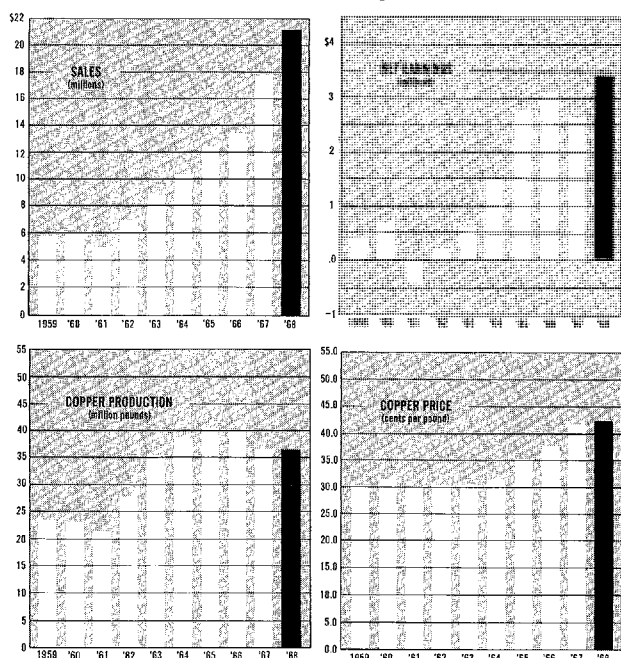


## FUTURE EXPECTATIONS

During 1968 we reduced the inventory of copper accumulated during the strike. This added about \$700,000 to before tax earnings and, of course, will not recur in 1969. On the other hand, if present price holds at least part of this amount can be recaptured.

The present mining operation is relatively stable and earnings growth in the future will come from improvements at Garland, the Refinery, and Plastics Company, all of which are expected. In addition, SX will contribute to earnings. We also expect that new ore bodies will be found and will contribute to future earnings.

In 1968 the surtax reduced after tax income by \$132,000. I expect the surtax to remain in 1969, but there is a chance it may not. All in all, it is not possible to estimate whether or not earnings during 1969 will achieve another record. The Ten Years Charts show four factors with important bearing on earnings.

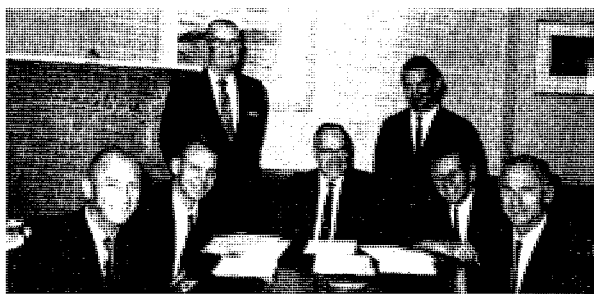


## DIVIDENDS

The regular quarterly dividend of 7½ cents was continued during 1968. In addition, a 5% stock dividend was paid in December of 1968. The 7½ cents per share cash dividend is being continued into 1969.

## MANAGEMENT

Management is an exceedingly important factor to us, as with any company. We have excellent management at all levels in each of our operations, but we do not have great depth of management. In order to improve management skills, we have initiated periodic meetings of supervisors for the purpose of improving communications throughout the organization, and also imparting new knowledge to our people. In addition, from time to time we conduct specific programs for specific groups.



Group attending a one day management seminar. Left to right: R. C. Bogart - Vice President; D. C. Lincoln - President; G. W. Colville - Executive Vice President; Dr. Charles Phillips - professor at Northern Arizona University and seminar leader; R. G. Pollack - President of Bagdad Plastics Company; W. T. Garland - President of Garland Steel Company; and W. N. Brown - Vice President of Garland Steel Company.

Robert C. Bogart is Vice President of the Company and Assistant General Manager of the Mine. We are proposing he be elected a Director at the annual meeting.



Robert C. Bogart at one of the Mine benches.

## STOCKHOLDER MATTERS

An application for listing on the American Stock Exchange is well along in preparation and should be filed so that, if approved, listing could be effective in two or three months. It is hoped this will give a broader and more ready market for our stock.

I would like to express thanks to our stockholders for the confidence they have shown in our Company and its management.

## EMPLOYEES

We have about 675 employees in all of our operations. Each year I find myself searching for new words to express my feelings about our employees and each year I find I repeat myself. Repetition is probably in order and is certainly sincere. Our employees are the most important asset of our Company. They constantly seek and find ways to do a better job. Their loyalty is above question. They display great ingenuity and flexibility in solving problems and coping with new and difficult situations. We are indeed fortunate in having the work force we have, not only at the Mine, but at Garland and Bagdad Plastics as well.

This year operations at the Mine resulted in a bonus there of \$422,000 which is a record high. I extend my hearty thanks to each and every employee in all of our operations for a splendid job well done.

BAGDAD COPPER CORPORATION

*David C. Lincoln*  
David C. Lincoln, President

We built and sold 50 Rood Cotton Harvesters in 1968, which indicates that demand for this machine is returning. In 1968 we built about \$400,000 worth of Hurricane Car Wash equipment, and we are expecting two or three times this amount in 1969. Additional factory space has been rented to accommodate assembly of this equipment.

The lettuce machines are well along in prototype development, and we hope will be ready for production this year. A gunitite machine was added to our line in 1968.

### **FUTURE**

Garland entered 1969 with about three months backlog in the fabricating shop, which is a record high. Indications are that 1969 sales will set another record, with strong showings in steel fabrication, highway culvert, and car wash equipment. Profit during 1969 should continue to improve. Emphasis on development of new products will continue.

Garland is an alert, well-managed operation with a superior work force. Potential for growth in both the near and long-term future is good.

## **Bagdad Plastics Company**

### **1968 OPERATIONS**

This operation is very small as expected. Sales during 1968 were \$100,000. There was an operating loss of \$32,000 for 1968, which was the first full year of operation for this company. It operated at a profit during the last quarter of 1968, and we expect this to continue.



*Line of molding machines at Bagdad Plastics Company.*

During 1968 we manufactured products only in the expanded polystyrene foam line. Our patented machine for producing polyurethane products was not completed by the inventor, who has since moved to another part of the country.

### **ACQUISITION**

During the latter part of 1968 we acquired Miller Plastics Company, which was about the same size as Bagdad Plastics Company and had a product line similar to ours. The Miller production equipment will be moved into our plant and the two operations completely integrated.

I believe the combined company will be large enough to serve as a base for carrying out our plans for the future.

### **FUTURE**

During 1969 Bagdad Plastics Company sales should increase substantially compared to 1968 and the operation should be profitable. However, it will still be a very small part of the total operation.

We are developing an understanding of the plastics industry, and particularly the expanded polystyrene foam part of this industry. During 1969 it is our intent to analyze markets for expanded polystyrene products in locations other than Arizona. We also intend to analyze markets in Arizona and elsewhere for plastic products other than expanded polystyrene foam that might be attractive to us. This analysis will include planning of facilities and management required to serve the new markets. By the end of 1969 we intend to have sufficient information to make a long-range decision on how far we want to go in the plastics business. If our decision is to move ahead, we should have specific plans for proceeding. We will call on outside consultants for assistance with this analysis and planning.

## **Corporate Matters**

### **PROGRAM FOR GROWTH**

There are some changes in emphasis in our program for growth. We will continue to actively seek new ore bodies with a variety of minerals, including copper, sulphur, and other metals and non-metals. In the past we have pursued this by exploration of unproven prospects, but in the future we will add the possibility of acquiring existing and operating mines. We are not limiting ourselves to domestic ore bodies. Copper is one of the most important minerals to us, but it increasingly appears that our best prospects for this will be exploration immediately adjacent to our present ore body at Bagdad. Consequently, emphasis on copper is shifting back home.

We continued work on the Tucson copper property during the year. Indications there are not becoming more positive, but we still have not made a final decision.

Regarding manufacturing activity, it increasingly appears to us that there are tremendous opportunities for expansion of Garland Steel Company by increasing sales of present products, developing markets for special products, and adding new special products. In addition, we believe that Bagdad Plastics Company may be capable of substantial expansion, as discussed above. Because of these factors, we have decreased emphasis on acquiring additional companies and increased emphasis on internal growth of our present operations. This by no means eliminates the possibility of outside acquisitions if the appropriate ones appear.

ducting costs of copper feed, sales of the refinery were \$725,000 in 1968 which compares to \$673,000 in 1967. Loss at the refinery in 1968 was \$604,000 compared to \$1,012,000 in 1967. The operating loss (before depreciation and equipment writeoff) in 1968 was \$268,000 compared to \$469,000 last year. Reduction in loss this year was possible because of somewhat more favorable pricing and improved cost control. During 1968 Bagdad took half of the total loss up to September 21, and the full operating loss plus half of the depreciation thereafter. September 21 is one possible cut off date for joint venture accounting, but this could be adjusted when final disposition of the venture is established.

During 1968 the refinery continued to be plagued by process and plant problems. We have solved a number of these and have done enough investigation so that we now believe we know how to handle most of the rest. We probably will not remedy all of these problems until we know disposition of our partner's half of the joint venture. One of the most severe problems was corrosion in the reduction autoclaves. Titanium vessels were installed about a year ago and results to date indicate that corrosion has been eliminated as a major problem.

In spite of the problems, operation of the refinery during 1968 was much more routine and reliable than in the past and by year end production was somewhat ahead of sales. This enables us to intelligently plan our marketing program which will be emphasized during 1969. The powder continues to be well received by customers.

## FUTURE

Powder markets continue to attract us because of the 12 to 18 cent per pound premium that powder commands over metal and because powder is a small specialized market that we are capable of serving as well as or better than the major copper producers. Because of this, it is our intention to solve problems at the refinery and stay in the powder business. Break-even operation at the refinery will require sales of about twice the 1968 level, but we believe this and more can be attained. Whether or not this will be reached in 1969 is questionable.

It is possible that there will be a relation between SX and the refinery in that certain types

of powder might be produced more economically by electro-refining. These electrolytic powders could then be finished in the present refinery. This would broaden our ability to serve the powder markets.

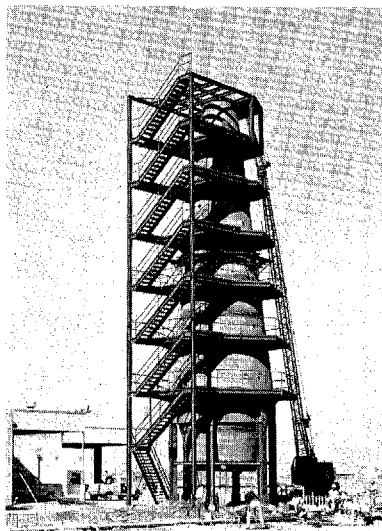
## Garland Steel Company

### 1968 OPERATIONS

Sales during 1968 (including sales to the mine) set a record high of \$5,055,000. This compares to \$4,455,000 in 1967. The increase in sales occurred in product lines that command the lowest profit margins, so that profit during 1968 set no records. It was \$114,000 compared to \$82,000 in 1967.

### PRODUCTS

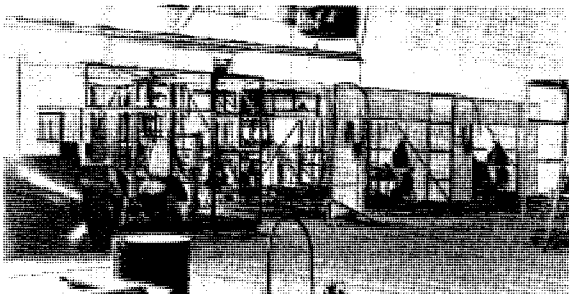
The shop was extremely busy during the year. Sales of steel fabricated items increased substantially. Sales of highway culvert decreased from 1967 due to a freeze on the Federal highway program during the last four months of 1968. The freeze has now been lifted.



Vertical lime kiln built and erected by Garland Steel Company.



Gunite machine added to the Garland product line this year.



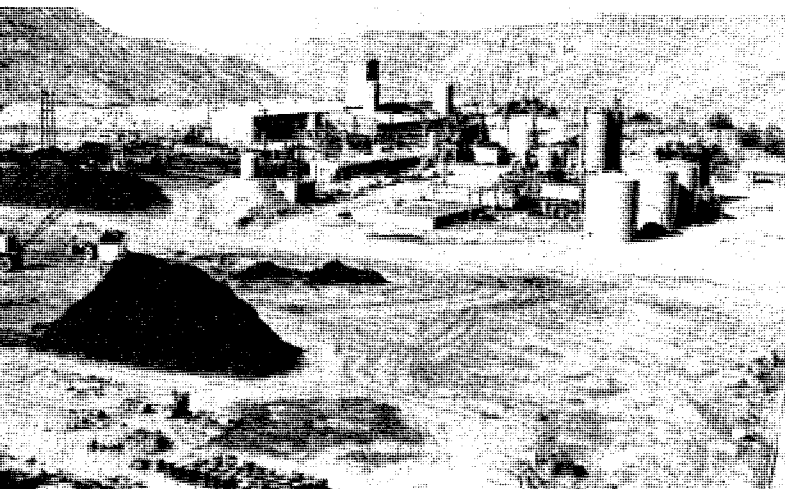
Three car wash machines in various stages of assembly in the factory space recently taken for this purpose.

reduces production. This can be seen by comparing the 11,066,000 pounds of leach production in 1967, when we were working on partly contaminated ore, to the 14,258,000 pounds this year after we brought a new ore pile into production. We fully expect SX to materially extend the life of our leaching ore body, but it is not possible to put a dollar figure on this benefit. Over the life of the ore body our additional recovery should pay for the SX plant several times.

The accompanying sketch shows generally how SX works and compares this to the present method.

Chemical reagents for SX are produced by General Mills. We have tested this process quite thoroughly in our pilot plant at Bagdad during the last two years. A production plant similar to the one we will install has been operating satisfactorily at another mine in Arizona.

Holmes & Narver of Los Angeles have been selected as engineering contractor. Engineering



*The SX Plant will be located in the leveled area in foreground. The acid plant and iron launders are just beyond the SX site and the powder refinery is behind these.*

is proceeding, but there are still one or two parameters to be determined from our pilot plant before we can complete engineering data. The SX plant should be in operation sometime during the latter part of 1970, but an exact construction schedule will not be determined until engineering is complete.

## NEW ORE PROSPECTS

Continued drilling adjacent to our present ore body has enabled us to define an additional 141 million tons of material with a grade of 0.52% copper. Stripping ratio over this would be about



*The possible new ore lays against the present ore but extending deeper and further into the mountain. Principal areas are in the main pit in the center of the picture and in the unmined area at left center.*

2:1. If this is combined with our present ore, the total is about 185 million tons of 0.56% grade. The combined grade is too low for economic treatment with our present mining and milling facilities. We are studying the possibility of constructing an entirely new 20,000 ton per day mill and increasing mining facilities to feed this mill. At present we can only guess at the capital cost of this project, but it could be on the order of \$35,000,000. This would be a very major project for Bagdad, and I am sure it will not materialize for some time, if ever. We will continue drilling to perfect definition of the ore prospect. We will also get a better idea of capital costs involved and operating economics.

## Refinery

### JOINT VENTURE

During 1968 our partner elected to resign from the joint venture. This resulted from a policy decision of Gulf States Land & Industries, the parent of Chemetals, to cease participation in the metal business and concentrate on fields more nearly in line with their basic activity. We have had lengthy discussions with Gulf States Land personnel concerning disposition of their half of the joint venture, but to date no conclusion has been reached. It is likely that they will either sell their half to a new venturer who will assume their position, or arrange for Bagdad to take over the entire project.

### 1968 OPERATIONS

The refinery produced 4,120,000 pounds of copper during 1968 which was an increase of 165,000 pounds over 1967. Inventory increased 870,000 pounds during the year, so that 1968 sales were about 3,250,000 pounds. After de-

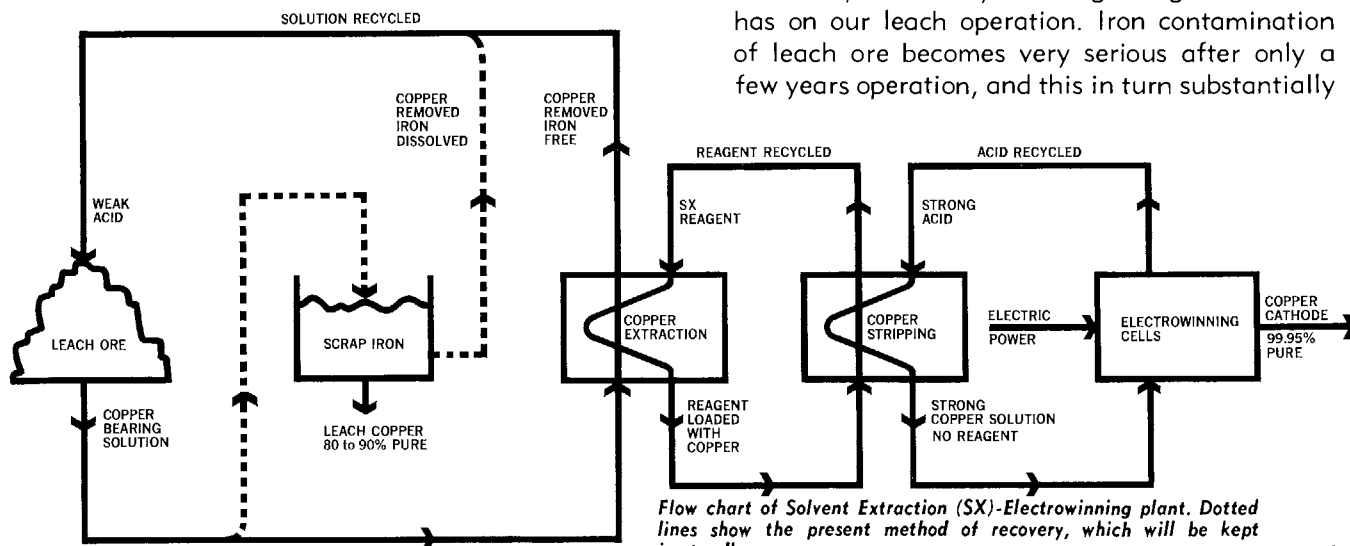
in the neighborhood of three cents per pound of copper, which substantially reduces the benefit from recent price increases.

The diagram illustrates the scrap iron leaching process. It begins with a tank on the left where 'WEAK ACID' is added to 'LEACH ORE'. This produces a 'COPPER BEARING SOLUTION'. This solution is pumped into a central tank containing 'SCRAP IRON'. In this second tank, 'COPPER REMOVED IRON DISSOLVED' occurs. The resulting 'LEACH COPPER 80 to 90% PURE' is then pumped into a final tank on the right, where 'COPPER REMOVED IRON FREE' is achieved. The solution from the final tank is recycled back to the first tank, as indicated by the 'SOLUTION RECYCLED' label at the top.

## OUTLOOK

## SOLVENT EXTRACTION

The chief benefit of SX is that it eliminates iron and, therefore, the degrading effect this has on our leach operation. Iron contamination of leach ore becomes very serious after only a few years operation, and this in turn substantially



Flow chart of Solvent Extraction (SX)-Electrowinning plant. Dotted lines show the present method of recovery, which will be kept in standby.

## **Highlights**

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Sales and net income both set records in 1968. Copper production for 1968 was about the same as last year, but sale of the excess inventory accumulated during the strike boosted 1968 earnings.

The copper industry strike was settled in the spring of 1968 and the industry began returning to normal. Copper became available to most users, but premium prices in the dealer market have persisted to the present time, albeit at much lower levels than during the strike. We do not participate in these premiums on our post strike production.

The copper powder refinery continued operating at a loss in 1968. Production did not reach the breakeven point, but significant progress was made in defining solutions to our problems. Our joint venture partner, Chemetals, is leaving the venture and the refinery program will be unclear until we know what disposition will be made of their part of the venture.

Garland experienced record sales in 1968, but increases were in basic fabricated products which command the lowest profit margin, so that net income set no records.

Bagdad Plastics Company operated at a profit during the fourth quarter, and we expect it to continue profitable in the future. This is still a very small part of our total company, but it serves an industry that is capable of substantial growth.

## **Bagdad Mine**

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### **PERSPECTIVE**

The Bagdad Mine continues to be by far the largest segment of our business. It contributes about three-quarters of our sales, more than 95% of our net income, and employs about three-quarters of our people.

### **COPPER INDUSTRY AND MARKETS**

Turmoil in the copper industry subsided rapidly following the end of the strike in March of 1968. Continued heavy demand for copper, both domestically and abroad, has kept dealer price above primary producer price, although premiums are not nearly as large as during the strike. We do not participate in these premiums because we sell to one of the primary producers.

Prior to the strike, primary producer price was

about 38 cents per pound. This was raised to 42 cents per pound following the strike, and in January of 1969 it was raised again to 44 cents. Considerable additional world productive capacity is programmed to come on stream during the next few years, and it is entirely possible that world supply will exceed demand. In this event I would expect dealer premiums to disappear and pressure could develop on the primary producer price.

The strike resulted in substantial wage increases throughout the copper industry. Although we were not on strike, we experienced the same cost increases.

### **PRODUCTION**

Sulphide concentrate production in 1968 was 22,218,000 pounds copper content, which is 13% lower than 1967. Ore grade during 1968 was 0.65% compared to 0.77% in 1967. Reduction in grade is the chief cause for lower production this year. Production in future years can be expected to vary somewhat, depending upon ore grade, but neither 1968 nor 1967 production should be considered untypical.

Leach production in 1968 was 14,258,000 pounds copper content, which is 29% higher than 1967. This increase was possible because the new ore pile was in production for the full year 1968, which enabled us to greatly reduce the degrading effect that iron accumulation exerts on leach production. Production during 1969 is expected to be about the same as 1968, and by the end of 1970 we hope to have eliminated the iron problem entirely by introduction of the solvent extraction method of recovery. This is discussed in a later paragraph.

Molybdenum shipments in 1968 were 599,207 pounds of contained metal, compared to 519,639 pounds in 1967. Price in 1968 was about 4% lower than 1967, which reduced the benefit from increased production. Molybdenum is a by-product, so that production may experience relatively wide variations from year to year, but I expect it to continue to stay in the same neighborhood that it has been during the last few years. Molybdenum is in ample world supply, and I do not expect any price increase in the near future, and it is possible it may decrease.

Silver is very small by-product of our operation. We produced 63,242 ounces in 1968.

# Cyprus Bagdad A Storm Water Management Success Story

## Poster Board Session

American Mining Congress  
Mining Convention '94  
September 18-21, 1994  
Phoenix, Arizona



DAMES & MOORE

Alexander W. Gourlay, P.E.  
7500 N. Dreamy Draw Dr. Suite 145  
Phoenix, Az. 85020  
(602) 371-1110 ext. 439



Cyprus Bagdad Copper Corporation

A Division of Cyprus Climax Metals Company

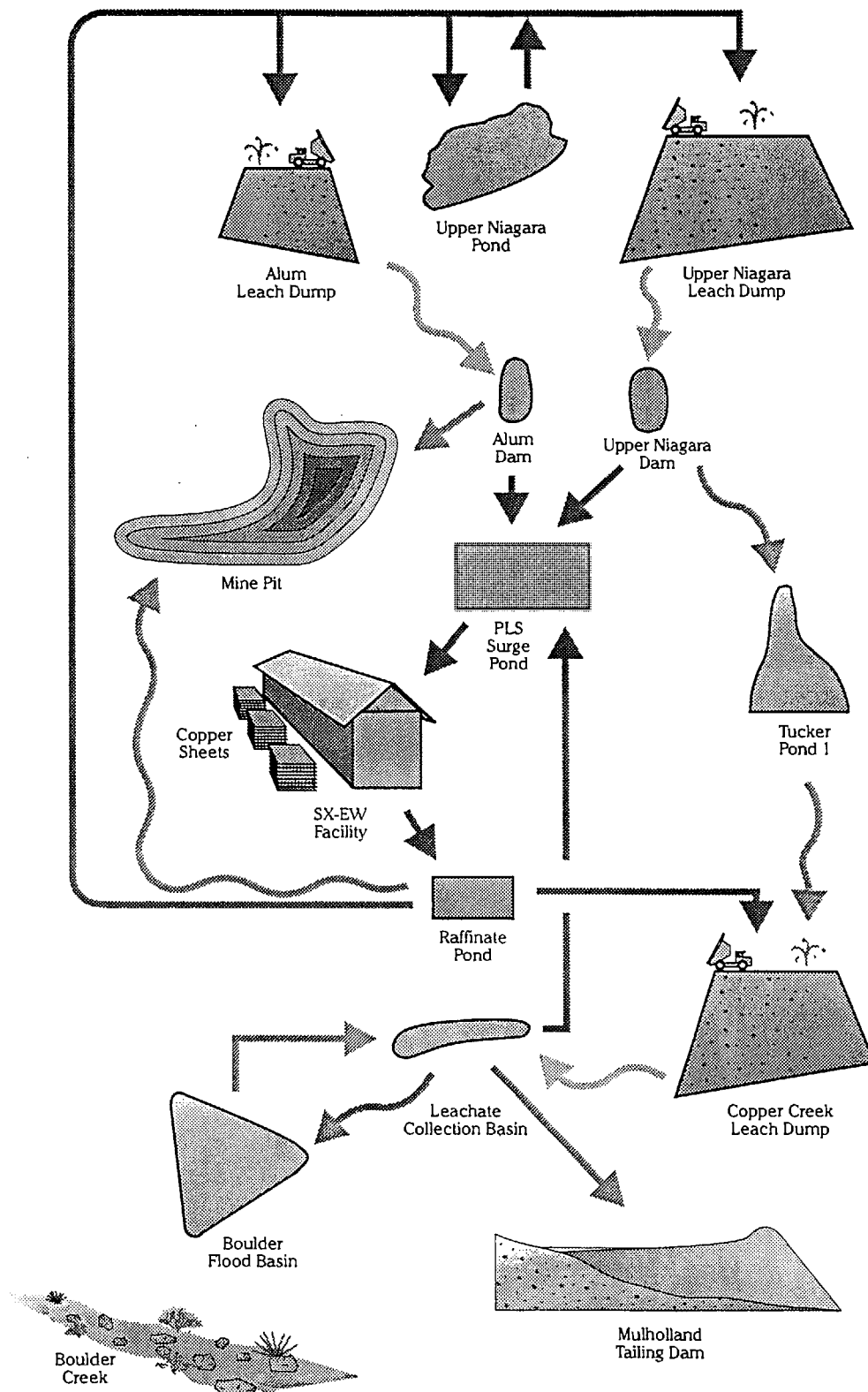
Colleen D. Kelley  
Environmental Coordinator  
P.O. Box 245  
Bagdad, Az. 86321  
(602) 633-2241 ext. 204

## **ELEMENTS OF THE CYPRUS BAGDAD COPPER CORPORATION STORMWATER MANAGEMENT PLAN**

- Map and Description of the Stormwater Control Ditch System.
- Stormwater Flow Modeling for Containment Criteria.
- Stormwater Pollution Prevention Plan.
- Trial Use of Automated Sampler System.
- Field Aids such as Summary Placards and Ditch Signs.
- Training of All Employees.



# Stormwater and Leachate Management System



Legend:



- **Stormwater Overflow**



### Excess Stormwater Pump Lines

### Leachate Pump Lines



**Cyprus Bagdad Copper Corporation**  
A Division of Cyprus Climax Metals Company

## **STORMWATER MANAGEMENT STRATEGY**

In the early 1980s, Cyprus Bagdad Copper Company (CBCC) developed and implemented an overall stormwater management strategy for the entire Bagdad mine site. Key features of the SWMP included:

- Diversion of unimpacted surface water run-on.
- Collection of run-on for use as make-up water.  
Routing of impacted run-off to on-site storage basins.
- Construction of HDPE-lined PLS pond for Copper/Niagara Creek leach dumps.
- Construction of Flood Basin downstream of PLS pond to prevent discharge to Boulder Creek during 100-year, 24-hour storm.

Since 1992, CBCC has updated the stormwater management strategy to:

- Incorporate significant changes in mine operations since 1983.
- Implement formal stormwater management training program.
- Formalize existing ditch maintenance program.
- Satisfy new federal storm water discharge regulations.
- Modify the Copper/Niagara Creek leachate management system to contain run-off from 100-year, 30-day storm.

## **KEY SYSTEM MODIFICATIONS**

CBCC has implemented a series of facility and operations modifications to improve stormwater management capability, including:

- Increased pumping capacity from Copper Creek PLS pond.
- Construction of three storage ponds in the Niagara drainage.
- HDPE lining of Flood Basin and improved seepage interception.
- Implementing a formal O&M plan for collection and diversion ditches.

## DEVELOPMENT OF MODEL

The model is a hybrid of HEC-1 and an EXCEL spreadsheet. Development of the model required the following steps:

- Develop accurate and defensible design storms based on NWS and mine precipitation records to present date.
- Use HEC-1 to develop hydrographs from watershed producing runoff;
- Calibrate model using lag times to reflect measured runoff and seepage rates during January - February, 1993 storm events.
- Create a spreadsheet model (using EXCEL) which uses HEC-1 generated hydrographs as input and EXCEL macros for reservoir routing and pumped flow simulation. Reservoir routing software allows time-step by time-step recalculation of flows at point of origination and destination of pumped flows.
- The spreadsheet model allows system optimization according to CBCC-defined criteria (minimize pump size, minimize flows to tailing pond, minimize construction of additional detention, etc.) while satisfying regulatory and risk-based concerns about eliminating off-site discharge.

## **UNIQUE FEATURES OF SURFACE WATER MODEL**

### **Model Handles Circular Flows**

Most surface water hydrology models (e.g. HEC-1) do not allow for tracking of water that is pumped back to storage and which eventually returns via overflow of the storage or via application to leach dumps.

Modeling of circular flows is important for long duration storms (i.e, several weeks) because high volume pumps play a critical role in stormwater control.

Modeling of pumping is essential to:

- Take credit for excess storage capacity in detention basins high in the watershed.
- Account for lag times through heap leaches (pumpback of excess flows to the leach dumps can provide an important delay in flows to the flood basin).

### **Model Handles Pump System Flexibility**

Pump rates can be changed for any pump in the system. Flexibility is essential to account for ability to:

- Increase pumping capacities to system limits during extreme floods,
- Alter pumped flow destinations in accordance with existing or proposed operational criteria.

### **Model Estimates Pumped Volumes**

The model can predict, for various design storms and at any time during the storm, the incremental volume of water pumped or diverted to each destination from a multitude of pump stations or diversion points.

## **MODEL USE**

### **Identify Required System Modifications**

The model was used to evaluate the impact of the proposed system improvements, such as construction of diversion ditches, low infiltration storage ponds on the leach dumps, and changes in pump and line capacities. The objective of these evaluations were to:

- Eliminate off-site discharges.
- Minimize diversions to the pit.
- Maximize leaching of the dumps during the storm.
- Maximize the flexibility of the stormwater management system.

### **100-Year, 24-Hour Storm Management**

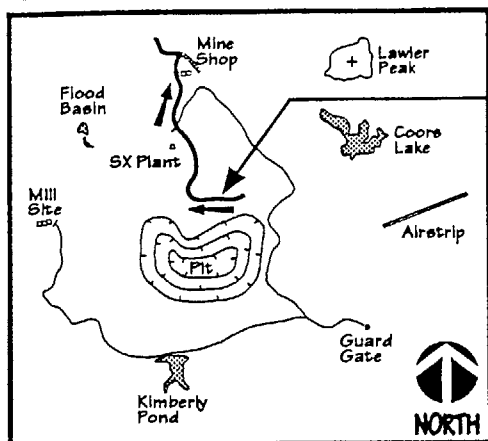
Applicable Arizona stormwater management rules and guidance require management of this storm without off-site discharge. During this short duration, high intensity storm, there is little time to remove water by pumping. It is used to define minimum storage requirements.

### **Maximum Saturation Event Management**

This storm has a longer duration (14 to 30 days) with lower rainfall intensity than the 24-hour storm at about 4 times the total volume of the 24-hour storm. The pumping system for the Copper/Niagara Creek Leachate System was sized to handle long-term, increased flows resulting from this storm without off-site discharge.

### **January-February, 1993 Storm**

During this period, the mine received over 12-inches of rainfall, corresponding to a 230-year storm event. The runoff from this storm was successfully contained by the mine with minimal impact on production and operations. The model was used to evaluate storage and pumping alternatives during the storm. Following the storm, data collected was used to calibrate and improve the model.



## Copper Creek Mesa Diversion Ditch

### Maintenance

General

### Frequency

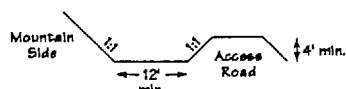
Every 3 months and after major storm events.

### Point

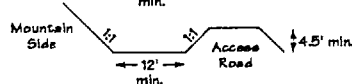
### Description

### Maintenance Requirement

1 Required cross section



2 Required cross section



3 Discharge from ditch enters natural gully and flows down hillside to point 5 where it re-enters manmade channel

• None

4 Small ditch catches runoff from the hill

• Periodically clean and maintain the ditch

5 Diesel fuel line encased in a metal pipe crosses the ditch at this location

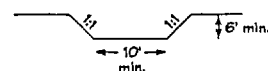
• Take care not to damage or break the line during maintenance

6 Three 60-inch culverts under the haul road

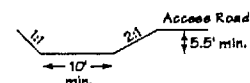
• Keep the inlets and outlets to the culverts and the culverts themselves, free of sediment, rocks, and debris

• Maintain berms around the inlets so that the water can pond to a depth of 10 feet or more in front of the culverts

7 Required cross section



8 Required cross-section



9 Confluence of Lawler Peak Diversion Ditch and Copper Creek Mesa Diversion Ditch

• Maintain erosion protection at the confluence and periodically repair erosion damage

10 Weir flow measuring device

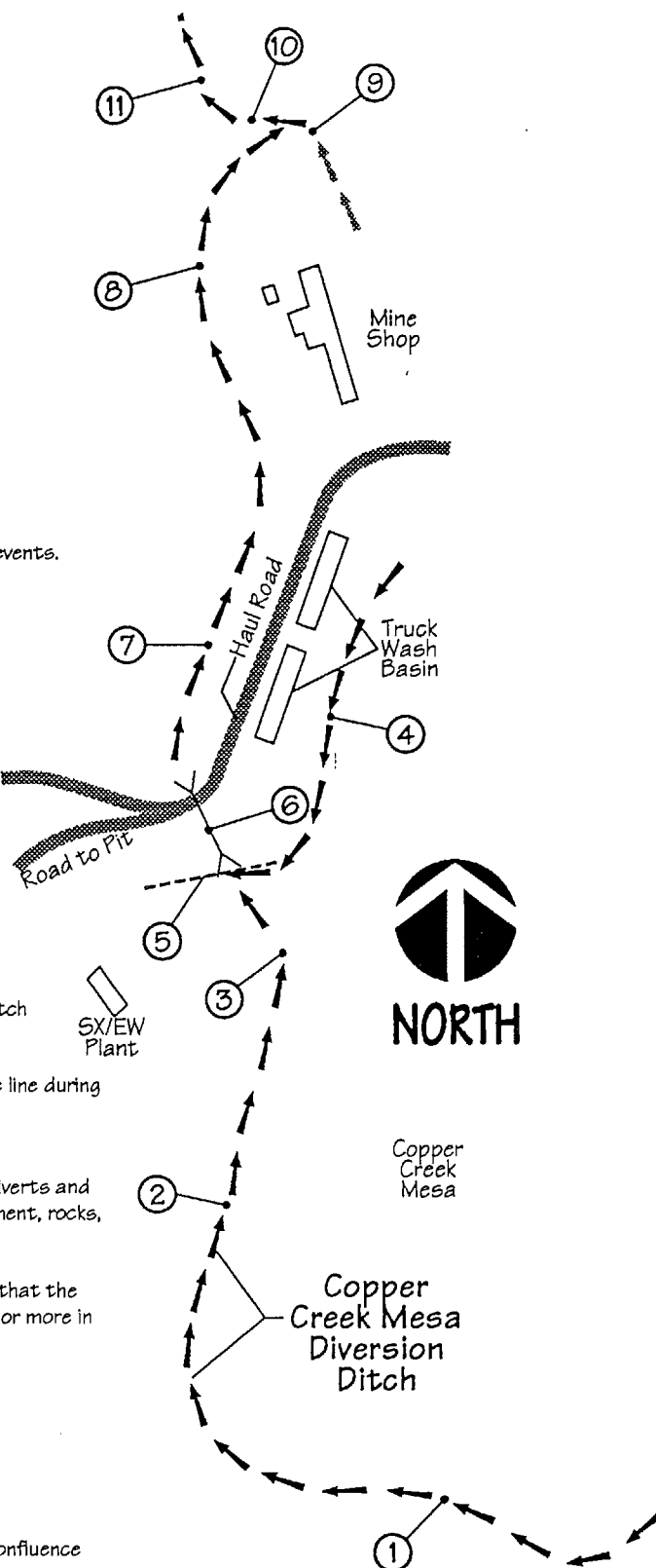
• Inspect for damage after major storm events. Report any damage to Colleen Kelley, ext. 204

11 Ditch discharges to a natural gully that carries the flow to Boulder Creek

• None



Dames & Moore  
Phoenix, AZ  
11981-008-022



## Copper Creek Mesa Diversion Ditch Maintenance Plan

Cyprus Bagdad Copper Corp.  
January, 1994  
Data Sheet No. 6



# Aladdin's Lamp

BAGDAD, ARIZONA

VOL. 10 — NO. 5

TAKE CARE — GET YOUR SHARE

MAY, 1973

## 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 percent voting in favor out of the total 1,613,175 shares eligible to vote. At the Cyprus Meeting 83.0 percent 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	55.9c	50.1c

+ 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.

Sincerely,  
BAGDAD COPPER CORPORATION  
David C. Lincoln, President

#### TIRE LOSS DUE TO ROCK CUTS

April, 1971	\$2,184
April, 1972	\$1,300
April, 1973	\$ 475
1972 Monthly Average	\$1,204
1973 Monthly Average To Date	\$1,129

#### Profit Sharing Bonus

1972 Profit-Sharing Kitty (Pro-rated)	\$ 39,084
1973 - Earned to March 31	\$ 80,664
Estimated Kitty	\$119,748

Estimated Rate Factor, 1.2

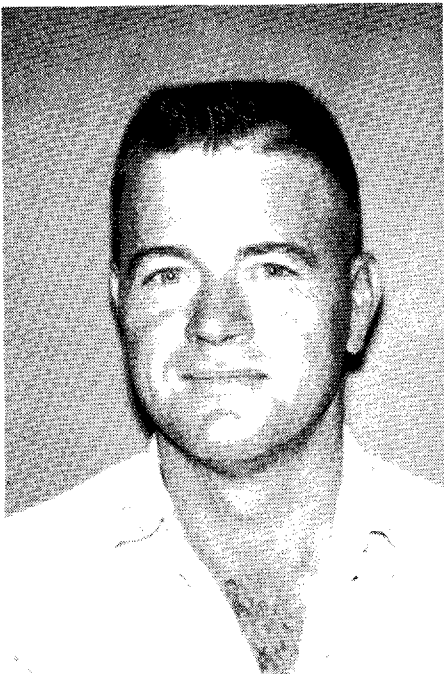
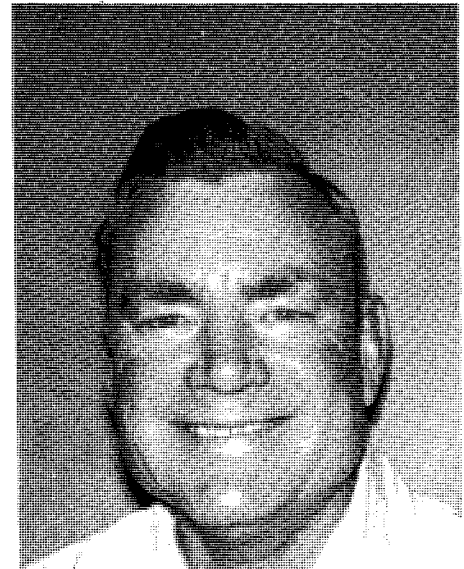
# Service Pins Awarded . . . . .



**25 YEARS — W. A. "DUB" McCOMBS** is a Diamond Driller. Born in Spur, Texas, he came to Bagdad from Seligman. Dub is a part-time commuter between Bagdad and Kirkland Junction. He and Dorothy bought the TUFA TAVERN, and Dorothy lives there to run it, while Dub spends part of his time in a camp trailer in Bagdad. They have 3 children. Clarann is Mrs. Dick Pike, lives in Yava and helps Dorothy when she can. Dick is now in the well drilling business. Linda Davis is their other daughter and she lives in Flagstaff where her husband Ray runs a service station. Spike, their son, will finish up a 4-year hitch in the Marines next January. He's now stationed in Okinawa. The McCombs also have 3 granddaughters. If the tavern business isn't enough work, there's the service station and two cabins to take care of, and Dorothy intends to start a restaurant in the near future. Their vacation plans this year will depend a great deal on whether the girls can find time to run the business for two weeks — Dub and Dorothy want to go fishing.



**20 YEARS — HOWARD MOSELEY** is a Relief Shifter in the Pit Department. He was born in Sayre, Oklahoma and lived there until he and his bride Charlotte came to Bagdad in 1953. Howard more or less followed the advice of some other members of his family in coming to Bagdad — his sister, Mrs. Mildred Armstrong, works at the store and his father, Houston, is a Bagdad retiree with 19 years of service. Charlotte and Howard have one daughter and three sons. Cathy was graduated from Bagdad High, and will finish her first year at Yavapai College this month. Danny will graduate from Bagdad High this year and plans to go to DeVries Institute in Phoenix to study electronics. David is a sophomore this year and Darrell is in the 6th grade. Cathy was a Rainbow Girl and Charlotte has been a very helpful participant in the activities of the Order of Rainbow for Girls at Bagdad. The men of the family enjoy hunting, fishing and rock collecting.



**15 YEARS — A. M. "MICKEY" WILLIAMS** was born in Prescott and came to Bagdad in 1954. After working for Cyprus Mines about 3½ years he started to work for Bagdad. He is a Shovel Oiler. Maxine, Mickey's wife, works at the school. Her father and mother, Hank and Alta Breidenback are both Bagdad retirees; Hank with 21 years of service and Alta, 13½. Mickey and Maxine have 4 children; Roxanna Lynn is 13 and in the 8th grade; Keith 12 in the 7th; Neal 7 in the 1st; and Curtis 3 anxiously awaiting kindergarten. Mickey belongs to the Clan of Garnet Sipes, Sr., and is therefore related to almost half of Bagdad. Mini-bikes and go-carts occupy most of the Williams' free time right now, but fishing and hunting are pretty good pastimes, too, and they have a camper for that. Vacation plans this year had to be given up because of Mickey's lung surgery, but he has recovered and is back to work again.



**15 YEARS — ROBERT G. PLACE** has been a dairy farmer, truck driver and tireman. He was sent to Bagdad in 1956 while employed by Denton Tire Co., and after a year and a half, stayed on as Bagdad's employee. He is, of course, a Tireman in the Pit Department. Bob was born in Rochester, N. Y., and "saw the world" for 8 years with all those other sailors on convoy duty during WWII. Rita is Bob's wife and they have 3 children. Maynard is a diamond driller for Bagdad and is married to the former Linis Culver. Linda is one of Bob and Rita's daughters and the other is Karen, who is a freshman at Bagdad High. Linis and Maynard have given Bob and Rita a granddaughter to spoil. Vacation plans haven't been made this year, but Bob's hobbies are hunting and fishing.



## ..... More Service Pins



**5 YEARS — DENNY M. PHILLIPS** is a Relief Rotary Drill Helper. He started working for the Refinery, but a bout with diabetes forced his transfer to the Pit Dept. He was born in Bakersfield, Calif., and gave the Army 3 good years — 27½ months of which were spent in Germany, which was very good. He worked in Calif. prior to Bagdad, as a tree-topper. Sharon, Denny's wife, works in the Warehouse office. They have 3 children: Deborah 8, is in the 3rd grade; Joe 6, is in the 1st; and Travis, at 4, can hardly wait for kindergarten. Dennis's hobbies are hunting and fishing — not very much of that right now — but a lot of yardwork. The Phillips plans a trip to visit an Aunt at Eagle Creek to fish and help out on the ranch this summer.

# Our School

Without question, the North Central Evaluation Program that is currently underway at Bagdad High School is the most important upgrading to be undertaken since the very start of our educational program. However, there are other avenues of great importance to the student that are being initiated, and these will tend to augment this larger endeavor in no small measure.

During the past year, several parents have expressed a desire for a comparison between the achievements of Bagdad students and those represented by the National Norms. This was particularly indicative in the case of mathematics. Because it was not a single request, but rather an encompassing one, the board and the superintendent decided to seek outside professional assistance in the matter. This for two reasons: first, it would represent an unbiased approach; and, secondly, the outside professional not being accustomed to our daily routine, would necessarily have to dig from scratch; and, thus, would be in a better position to recognize inadequacies. To this end, we sought the services of Drs. Lloyd and Sage of Northern Arizona University.

After an initial, on-the-spot evaluation, it was decided to retain Dr. Sage to assist us. This was a fortunate move in two respects. First, of course, was for the aid we could expect in obtaining the comparative information we desired, and, secondly, for the valuable assistance he could furnish in our North Central Self-Evaluation Program. In this latter instance, the committee felt that, because of the apparent difficulties we were having in filling out the questionnaire, it would be almost impossible for us to correctly evaluate ourselves. In other words, how do you look at yourself objectively if you don't know what you are looking for. Dr. Sage spent a good portion of

Thursday afternoon with our committee, consisting of two teachers, a parent, a student, and a board member. We now feel that we have a basis, at least, for an intelligent, unbiased self-evaluation.

To get back to the original purpose for which Dr. Sage was retained, the Elementary School was given a testing program. This showed that we had the usual number of near-geniuses, an average number of middle-of-the-roads, and a few also-rans. Nothing was evident that indicated Bagdad has any serious deficiencies in any particular avenue. However, some knowledge always leads to a desire for more, so Dr. Sage has been retained for the 1973-1974 school year. He will spend all the time deemed necessary to place our school in the enviable position we want it in.

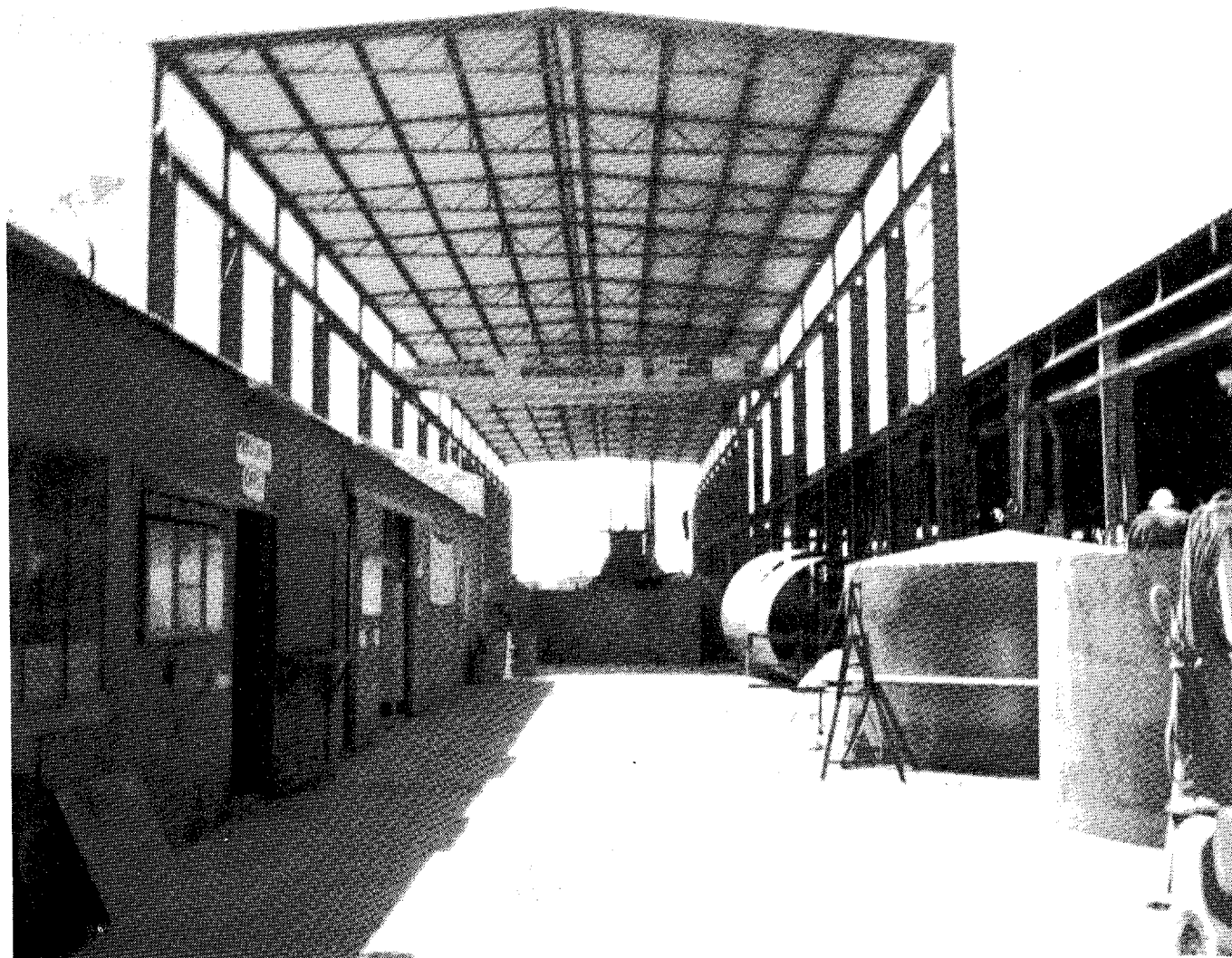
These are the avenues that will be pursued under his guidance:

1. A vigorous testing program to find our strengths and our weaknesses.
2. A means to smooth out the transition from Elementary School to High School.
3. The procurement of visual aids and devices to help the student better understand the subject being offered.
4. A visitation program for our teachers whereby they will visit other representative classrooms around the state for the purpose of obtaining new ideas and methods of instruction.

This will be a completely constructive program designed to better the conditions for the student by further development of what we now possess, augmented by the acquisition of material and ideas that will better promote student understanding and goodwill.

# Garland Steel Company News

April, 1973



We are pleased to report that the heavy fabrication bay has been completed and is now operational. The picture shows the added height in comparison to our existing bays, but one cannot get a true feeling of its size without standing underneath and looking up. This structure is readily visible from the freeway, and could serve as an excellent billboard.

+ + +

Field work has taken a large surge upward. Orders have recently been received from Stearns-Roger Corporation for forty tanks to be erected for Phelps Dodge Corporation at Morenci. Additionally, our crews are in the final erection phases of three 1,000,000-gallon oil storage tanks for Phelps Dodge Corporation at Tyrone, New Mexico. Many other field erection projects are also scheduled in Arizona, New Mexico and California. All things considered, it looks like another busy year is shaping up for Frank McRae and his Boilermakers.

+ + +

New employees since our last report include Roy D. Seal, a native Texan, who had been with Chicago Bridge & Iron Corporation for the last 7 years, most recently in Baton Rouge, Louisiana. Roy is single, and enjoys the outdoor life of hunting

and fishing, and admits to occasionally dabbling in the stock market. He joins our sales force, and is already showing signs of wonderment at the furious pace maintained within our company.

Shauna Salyers recently came to work for us, taking over as receptionist and telephone operator, replacing Amyda Heitkamp who left to pursue a legal career. Shauna is married, and comes from Los Angeles. She admits to having 2 dogs and a cat, and enjoys motorcycles and sports cars, as well as the outdoor life in general. We welcome both Roy and Shauna to our company.

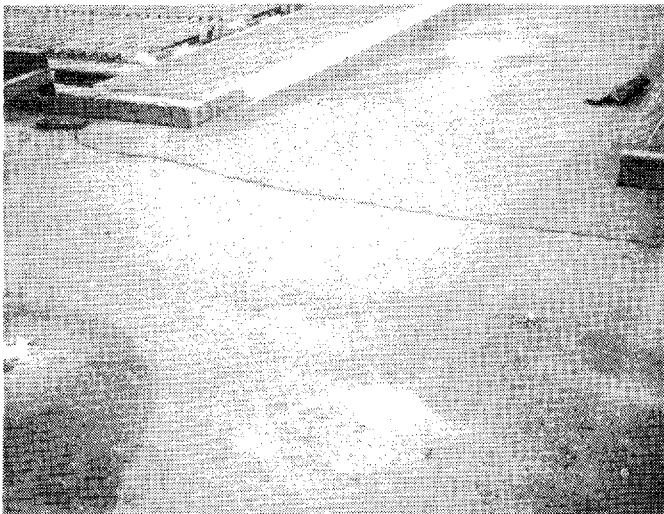
+ + +

Bowling activity finds the Misfits in top position, followed by the Steel Huggers, the Outcasts, the Cottonpickers, the Unloaders, and the Masters 5, in that order. With the bowling season approaching its end, it looks as if no one will get that magical "300" game or "600" series.

Editor's Note: Our apology to Garland — the April News came in too late for publication last month.

# Leach Solutions

After approximately nine months of operation at the electrowinning plant, some acid corrosion developed on the electrowinning floor due to dripping of electrolyte as we pulled out daily cathode production from the cells. In order to correct this situation an epoxy floor covering was purchased and applied to the middle aisle and around the cathode wash tank of the electrowinning floor. Because of the ability of this material to withstand the corrosive action of the electrolyte, it was recently decided to cover the entire floor. At a cost per square foot of about half that involved in the first epoxy application,

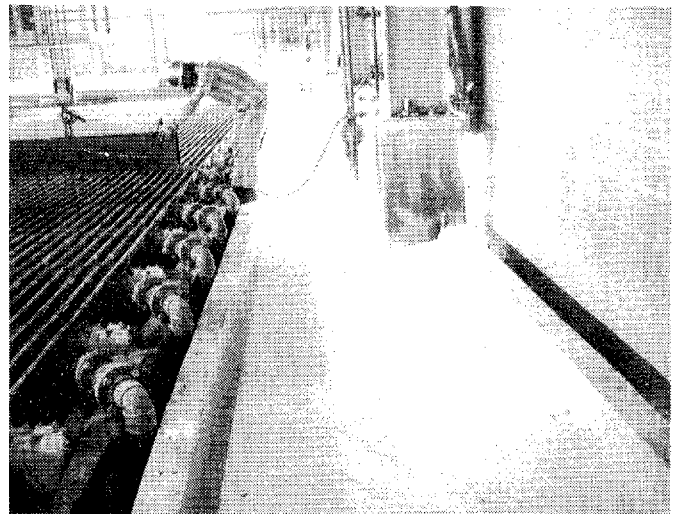


Applied in April, 1971, this epoxy coating is still in excellent shape. This view shows some of the electrolyte dripped on the floor.

Epoxy Surfaces, Inc. covered the rest of the floor with a similar material, which is expected to preserve it for years to come.

Raul Lopez, our Lead Dump Man, was happy to receive a shipment of four-inch plastic pipe last month. It will be used to replace some old lines on the Alum and Mineral Creek leach dump areas, and for installation of new lines on the Copper Creek leach dump as that space becomes available.

Average daily cathode production for the first four months of 1973 was 41,014 pounds.



This floor covering, applied by Epoxy Surfaces to the rest of the floor, is expected to last for years.

## MORE PAY: MORE COST

By the year 2000, a person will have to earn almost \$60,000 a year to equal a 1970 income of \$10,000, a U.S. Savings & Loan League study indicates.

Proportionally, a \$20 bag of groceries will cost close to \$115.

Further proof of higher wages and a higher cost of living comes from the Bureau of Labor statistics:

Year	C of L	Weekly Wages
1965	94.5	\$ 95.06
1966	97.2	98.82
1967	100.0	101.84
1968	104.2	107.73
1969	109.8	114.61
1970	116.3	119.46
1971	121.3	126.91
1972	125.5	136.47

## 'TAXARE' LIGHTLY PLEASE

The word **tax** is derived from the Latin **taxare**, which means touch, compute, or censure.

Sounds appropriate enough.

## PROMOTE vs. PROVIDE

The Preamble of the Constitution declares that we must **promote the general welfare**.

Some of today's citizens confuse **promote** with **provide**.

**To promote** paves the way for one to work more to attain more things.

**To provide** paves the way for one to attain more things. And there's the rub.

For those who produce a service or product must do more than their fair share so that others who cannot or will not produce can receive a portion of another's productivity.

As citizens of a humane society, we must continue to provide for those who **cannot** produce.

But should we provide anything, with the exception of encouragement, for those who **will not** produce?

## Copper Market News

The Copper Market is in the process of installing six new cash registers. This is the first step of the plans to remodel the store this year.

# Sanders Mesa Versus Road Construction

The Pit Engineering Department reports that Sanders Mesa is grudgingly giving up its malapai and volcanic ash. The new road to the SX and Refinery areas is a prime project, and is being swiftly completed. The pilot road will be widened and a canyon is being filled, with an area some 500 feet wide by 150 feet deep left to go. At the filling of the canyon the road will be finished, with only some touch-up work remaining for completion of the project.

The main access road to the SX-Refinery areas is now located above the slide area and is a potential hazard. The relocation of this section of road will eliminate that problem. The new road, when completed, will be more convenient and about one mile

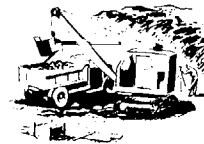
shorter, which will cut travel time for those working at the Refinery and SX Plants. It is hoped that the project will be completed during the latter part of June.

At times, the lower road will be closed when the 1600 shovel is working directly above and there is danger of falling rocks. As this is very hazardous, we ask your cooperation in not running the road blocks. On occasion, these road blocks have been disregarded, and some people have put themselves in extreme danger.

If you are working at the SX Plant or Refinery, we advise that you go through the pit when the lower road is closed.



BEFORE



These pictures (before, during and after) were taken of a recent blast, shooting off a point above the new road. This bluff projected 100' high and was shot to keep rocks from falling, thus insuring the safety of those using the road.



DURING



AFTER



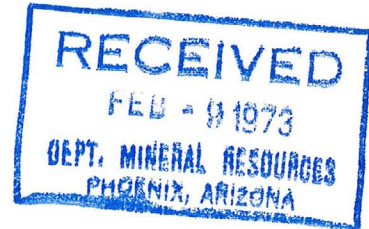


(602)

263-9407

# BAGDAD COPPER CORPORATION

55 EAST THOMAS ROAD, PHOENIX, ARIZONA 85012



February 9, 1973

To the Stockholders of Bagdad Copper Corporation:

On January 16, 1973, it was announced that management of Cyprus Mines Corporation and Bagdad Copper Corporation had agreed in principle to merge the two Companies. The proposal is a statutory merger with each share of Bagdad common stock receiving 1.2 shares of Cyprus common stock. Cyprus currently trades on the New York Stock Exchange and the Pacific Coast Stock Exchange.

Cyprus is a Los Angeles based international mining company. Their primary activities are copper mining, lead and zinc mining, iron ore mining, and ocean bulk shipping. In addition, they engage in some domestic manufacturing.

The proposed merger was approved by the Board of Directors of Cyprus on January 18 and by the Board of Directors of Bagdad on January 29. The matter is expected to be submitted to the stockholders of each Company at meetings to be held in May of 1973. The regularly scheduled Annual Meeting of Bagdad on April 10, 1973, will be postponed until the meeting at which the merger can be considered. Submission to stockholders will follow submissions to regulatory agencies. Prior to the stockholders meetings, each stockholder will receive proxy material describing the merger and its financial effects.

Enclosed is your regular quarterly dividend check in the amount of 10 cents per share payable February 9 to stockholders of record January 10, 1973.

Sincerely,

BAGDAD COPPER CORPORATION

David C. Lincoln  
President

# BAGDAD COPPER CORPORATION

55 East Thomas Road  
Phoenix, Arizona 85012

## TO THE STOCKHOLDERS

Attached is proxy material describing a proposed merger of Bagdad with Cyprus Mines Corporation. We are recommending that you vote for this merger. As described under "Business and Properties of Bagdad", the next logical step in the development of the Bagdad mine is increasing its ore processing rate at least five times to about 30,000 tons per day. This could require a capital investment on the order of \$100 million, which is more than Bagdad could do alone and still maintain reasonable risk-to-reward ratios. Merging with a larger company is intended to permit the mine development to take place.

Cyprus appears to be the best candidate for Bagdad for a number of reasons. They are in the mining business and understand it. We are favorably impressed with the historical growth in the Cyprus earnings as reflected in its accompanying consolidated statement of income recognizing, of course, that there can be no assurance of a continuation of that record. We believe that the Cyprus stock is not overpriced and that the exchange ratio of 1.2 shares of Cyprus for each Bagdad share is completely fair to the Bagdad stockholders.

We have obtained financial advice from Merrill Lynch, Pierce, Fenner & Smith Incorporated, who have expressed to us their opinion that the merger represents an appropriate means of financing the mine development and that the terms of the merger are fair and equitable to the Bagdad stockholders (see "Recommendation of Merger").

We further believe that Cyprus is large enough to get the expansion at Bagdad completed, but not so large that Bagdad will be an insignificant part of the combined company. Because of this, Bagdad stockholders may benefit from expansion of the Bagdad mine even after merging. In addition, we expect that Cyprus will do a good job in protecting values that exist in the employee group at Bagdad.

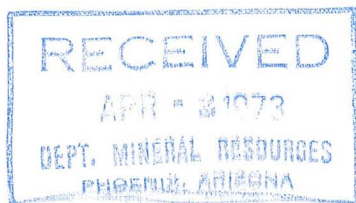
It is the intention of present Bagdad management to become active in Cyprus in whatever capacity each member can make a contribution.

I would appreciate it if you would sign and return the enclosed proxy card.

Since rather full financial and other information relating to Bagdad is included in the accompanying proxy material, we have not gone to the expense of preparing a separate annual report to stockholders for 1972.

Sincerely,

DAVID C. LINCOLN  
President



# **BAGDAD COPPER CORPORATION**

**55 East Thomas Road  
Phoenix, Arizona 85012**

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## **NOTICE AND PROXY STATEMENT FOR DEFERRED ANNUAL MEETING OF STOCKHOLDERS To Be Held On May 1, 1973**

To the Stockholders:

The deferred annual meeting of the stockholders of Bagdad Copper Corporation ("Bagdad") will be held at the Phoenix Little Theater (in the Phoenix Library complex), 25 East Coronado Road, Phoenix, Arizona, on May 1, 1973 at 10:00 A.M., M.S.T., for the following purposes:

1. To consider an Agreement of Merger entered into between Cyprus Mines Corporation ("Cyprus"), a New York corporation, and the directors of Bagdad, with a view to merging Bagdad into Cyprus;
2. To elect a Board of Directors to serve until the effective date of the proposed merger if the merger is approved or, if the merger is not approved, to serve until their successors are elected and qualified; and
3. To transact such other business as may properly come before the meeting or any adjournment thereof.

A copy of the proposed Agreement of Merger substantially in the form which will be submitted to the meeting is annexed to this Proxy Statement as Exhibit A. The book value of Bagdad's assets as of December 31, 1972, and its indebtedness at that date, are as set forth in its enclosed financial statements.

Each of the 1,613,175 shares of Bagdad's capital stock, \$2.50 par value, outstanding at the close of business on March 30, 1973 entitles the record holder to notice of, and to vote at, this meeting or any adjournment thereof, but shares can be voted at the meeting only if the holder is present or represented by proxy.

By Order of the Board of Directors

**DON CORBITT**  
Secretary

Phoenix, Arizona  
March 31, 1973

### **I M P O R T A N T !**

Stockholders are earnestly requested to date, sign and mail promptly the enclosed proxy. A postage-paid envelope is provided for mailing in the United States. Being entitled to revoke your proxy at any time before it is exercised, you may do so and vote your shares in person if you attend the meeting.

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**CYPRUS MINES CORPORATION**

523 West 6th Street  
Los Angeles, California 90014  
Tel: (213) 629-5771

**BAGDAD COPPER CORPORATION**

55 East Thomas Road  
Phoenix, Arizona 85012  
Tel.: (602) 263-9407

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**JOINT PROXY STATEMENT  
AND  
PROSPECTUS**

**March 26, 1973**

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THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION NOR HAS THE COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

**INTRODUCTORY STATEMENT**

This Joint Proxy Statement and Prospectus is furnished in connection with the solicitation of Proxies by the managements of Cyprus Mines Corporation, a New York corporation ("Cyprus"), and Bagdad Copper Corporation, an Arizona corporation ("Bagdad"), for use at the annual meetings of their stockholders both to be held on May 1, 1973, and at any and all adjournments thereof. The information contained herein relating to Cyprus has been furnished by Cyprus and the information herein relating to Bagdad has been furnished by Bagdad.

This Joint Proxy Statement and Prospectus should be read carefully. It proposes the merger of Bagdad into Cyprus. If the merger is approved by the stockholders of both corporations and becomes effective, each of the presently outstanding shares of Capital Stock of Bagdad will be exchanged for 1.2 authorized but previously unissued shares of Common Stock of Cyprus. The number of issued and outstanding shares of Common Stock of Cyprus will be increased by up to 1,951,000 shares, from 8,781,600 to 10,732,600 shares. Accordingly, it is important that the shareholders of both corporations carefully consider the information set forth in this Joint Proxy Statement and Prospectus.

At the Cyprus meeting the holders of Cyprus' Common Stock will be asked to vote on the merger proposal and for the election of fourteen directors to serve for the ensuing year and until the election and qualification of their successors.

At the Bagdad meeting the holders of Bagdad's Capital Stock will be asked to vote on the merger proposal and for the election of nine directors to serve until the effective date of the proposed merger if the merger is approved or, if the merger is not approved, for the ensuing year or until the election and qualification of their successors.

The costs incurred in connection with the registration statement of which this Joint Proxy Statement and Prospectus forms a part are approximately \$140,000, of which \$100,000 will be paid by Cyprus and \$40,000 will be paid by Bagdad.

**SUMMARY OF THE PROPOSED MERGER**

Consummation of the proposed Agreement of Merger will result in the conversion of each share of Bagdad outstanding at the effective date of the merger into 1.2 shares of the Common shares of

Cyprus. In lieu of issuance of any fractional Cyprus Common share Cyprus will pay in cash its value computed on the basis of the median between the high and low prices of Cyprus Common shares on the New York Stock Exchange on the date the merger becomes effective. That date will be the date of filing of a certificate of merger by the State of New York Department of State following compliance with all filing requirements of the State of Arizona.

Cyprus will be the Surviving Corporation and the initial Articles of Incorporation and By-Laws of the Surviving Corporation will be those of Cyprus.

The initial directors of the Surviving Corporation will be those of Cyprus in office immediately prior to the merger. The Agreement of Merger specifies that at the first meeting of the Cyprus Board following the merger David C. Lincoln — President and a Director of Bagdad — and Frank L. Snell — Vice President and a Director of Bagdad — will be appointed by the Cyprus Board of Directors as additional Cyprus directors. The Agreement of Merger specifically contemplates that the officers of Cyprus will become the initial officers of the Surviving Corporation.

By the terms of the Agreement of Merger Cyprus will acquire all the assets and assume all the liabilities of Bagdad including contracts and employee benefit plans.

If the holders of two-thirds of the shares of each corporation approve, the deadline specified in the Agreement for consummation of the merger is October 31, 1973, but its consummation at an earlier date is anticipated.

### **CONDITIONS OF CLOSING**

In addition to shareholder approval there are other conditions to the effectiveness of the merger which include (i) the listing of the Cyprus Common shares to be issued in exchange for Bagdad shares on the New York and Pacific Coast Stock Exchanges, (ii) the receipt of satisfactory rulings from the Internal Revenue Service with respect to certain tax aspects of the merger, (iii) all requisite governmental approvals, or lack of objections, (iv) the accuracy as of the merger's effective date of all representations contained in the Agreement of Merger, (v) the favorable opinions of counsel for the respective parties as to specified aspects of the transaction, (vi) satisfaction by Cyprus with Bagdad's ore reserves, estimated development and operating costs, and estimated financial benefits to Cyprus and satisfaction by Cyprus with Bagdad's title to its ore reserves and other properties and (vii) satisfaction by Bagdad with its independent study of Cyprus' assets and operations and that the merger with Cyprus will provide financial benefits which are acceptable to Bagdad stockholders.

The merger may be abandoned if specified conditions are not fulfilled by either party or if any regulatory authority should not issue any requisite approval or order. Either party has the right to waive any of the conditions not satisfied by the other party and to proceed with the merger.

### **RECOMMENDATION OF MERGER**

The terms of the Agreement of Merger are the result of negotiations between representatives of Cyprus and Bagdad. Among the factors considered were the existing assets and operations of each company, the relative market value of their securities and their managements' estimate of the prospective value of the two companies operated as a combined enterprise. The Boards of Directors and managements of Cyprus and Bagdad believe that the Merger of Bagdad into Cyprus is in the best interests of Cyprus, Bagdad and their shareholders for the following reasons:

The Bagdad mine is reported by Bagdad to have a significant copper ore reserve which was determined by drilling on 250-foot centers (on the average). This reserve is approximately 303,000,000 tons averaging 0.49% copper with a waste ore stripping ratio of 1.1:1. Computations were as of January 1, 1973 and drilling continues. Bagdad is presently operating a 5,600 ton per day mill, which is expected to operate throughout the period required for Cyprus to study the feasibility of an expansion

of the operations at Bagdad to a range of 30,000-40,000 tons per day or perhaps eventually larger and, if found feasible, to carry out the expansion. Bagdad is manned by an experienced organization with a successful record.

The capital investment, which is in the order of \$100,000,000 required for the expansion, is more than Bagdad could reasonably accomplish alone and still maintain reasonable risk-to-reward ratios. Merging with a larger company is intended to permit the mine development to take place. Merrill Lynch, Pierce, Fenner & Smith Incorporated, financial advisor to Bagdad, has expressed the opinion that the merger represents an appropriate means of financing the expansion of Bagdad's orebody and that the terms of the merger are fair and equitable to the Bagdad stockholders. Its opinion is based upon a review of the relative market prices of the corporations' respective common stocks, their historical sales and earnings, their financial condition, and certain other factors, but did not include independent verifications of the ore reserves and other properties of either corporation.

The members of both Boards of Directors voted unanimously in favor of the Agreement of Merger, with the exception of one Director of Bagdad, J. N. Anderson, who abstained from the vote because of a possible conflict of interest (see "Principal Stockholders of Bagdad", page 42). Mr. Anderson is the representative on the Bagdad Board of Directors of Noranda Mines Limited which company owns 12.6% of the outstanding Capital Stock of Bagdad Copper Corporation. All Directors voting in favor of the Agreement have indicated that they intend to vote all shares of stock owned or held by them individually in favor of the proposals, and recommend to their respective stockholders that they also vote in favor of them. Mr. Anderson does not join in the recommendation to the Bagdad stockholders, indicating his belief that courses alternative to the merger may be preferable.

## VOTING

### Cyprus Meeting

The Board of Directors of Cyprus has fixed March 13, 1973 as the record date for the determination of shareholders entitled to notice of and to vote at the meeting. Accordingly, only those shareholders of record of Cyprus Common Stock at the close of business on that date will be entitled to receive notice of and to vote at the meeting. There were 8,781,600 shares of Cyprus Common Stock outstanding on that date. Each share of Cyprus Common Stock will entitle the holder thereof to one vote.

Each Cyprus shareholder entitled to vote at the meeting has been furnished herewith a form of proxy for use by Cyprus' Management at the meeting. Any shareholder who signs and returns the proxy may revoke it at any time before it has been voted at the annual meeting by (i) written notice to the Secretary of Cyprus of its revocation, (ii) the execution of a new proxy, or (iii) upon request if the shareholder is present at the meeting.

In the absence of a contrary direction, all shares represented by valid proxies received by Management of Cyprus (which are not revoked before being voted with respect to the election of directors) will be voted for the fourteen nominees for directors whose names are listed below (see "Nomination and Election of Cyprus Directors", page 35). Although not now anticipated, if any nominees for directors should decline or become unable to serve, the proxies will be voted for substitute nominees recommended by the Board of Directors of Cyprus. For information concerning voting rights with respect to the election of directors of Cyprus, please see "Voting Rights With Respect to Cyprus Directors", page 35.

All shares represented by valid proxies received by Management of Cyprus (which are not revoked before being voted with respect to the Merger proposal) will be voted for or against the Merger proposal set forth above in accordance with the stockholder's direction and *if no direction is indicated on the proxy it will be voted FOR the proposal*. THE AFFIRMATIVE VOTE OF THE HOLDERS OF AT LEAST TWO-THIRDS OF ALL OUTSTANDING SHARES OF COMMON STOCK OF CYPRUS IS REQUIRED FOR THE APPROVAL AND ADOPTION OF THE AGREEMENT OF MERGER.

At the date hereof Management of Cyprus knows of no matters not specifically set forth in the Notice of Annual Meeting of Stockholders which will be presented at the meeting. In the event that any other matter properly comes before the meeting or any adjournment thereof, it is intended that the persons named in the form of proxy and acting thereunder will vote in accordance with their best judgment.

All solicitation costs for the Cyprus meeting will be borne by Cyprus. Following the original solicitation of all shareholders by mail, it is anticipated that arrangements will be made with banks, brokerage houses, custodians, nominees and fiduciaries to forward copies of the Proxy, Proxy Statement and Annual Report to persons for whom they hold shares of the corporation and to request authority for the execution of Proxies.

### **Bagdad Meeting**

So far as Bagdad's management is aware, the proposed Agreement of Merger and the election of directors will be the only matters to be voted on at the meeting of Bagdad stockholders. If, however, any other matters properly come before the meeting or any adjournments thereof, the proxy committee named in the enclosed proxy will vote upon such matters in accordance with its judgment.

Approval of the Agreement of Merger will require the affirmative vote of two-thirds of the outstanding capital stock of Bagdad. Outstanding on the record date of March 30, 1973 were 1,613,175 shares of Bagdad capital stock. See "Nomination and Election of Bagdad Directors" (page 40) for voting rights with respect to the election of Bagdad Directors.

This proxy statement is furnished in connection with the solicitation by Bagdad's management of proxies in the accompanying form. The cost of solicitation, which will be by mail, will be borne by Bagdad. It is also anticipated that brokerage houses and others will be reimbursed for their out-of-pocket expenses in forwarding documents to beneficial owners of stock held in their names. Directors, officers or employees of Bagdad may possibly solicit proxies by telephone or in person without extra compensation therefor.

### **CONVERSION AND EXCHANGE OF SHARES**

Under the terms of the Agreement of Merger, at the Effective Date of the Merger, each share of Bagdad's issued and outstanding Capital Stock will be converted into 1.2 shares of Cyprus Common Stock.

On the Effective Date of the Merger (last day of the calendar month in which the Certificate of Merger is filed with the State of New York), each certificate formerly representing Capital Stock of Bagdad will be deemed for all corporate purposes (except for the payment of dividends by Cyprus, if any, which will be conditioned upon the exchange of certificates as hereinafter provided) to evidence the ownership of the number of shares of Common Stock of Cyprus which the holder would be entitled to receive upon surrender. Each Bagdad stockholder of record on the Effective Date, upon surrender to Cyprus of certificates for Capital Stock of Bagdad, will be entitled to receive stock certificates for the aggregate number of full shares of Common Stock of Cyprus into which shares of Bagdad so surrendered have been converted. As soon as practicable after the Merger becomes effective, transmittal forms will be sent to the former Bagdad stockholders for use in forwarding their certificates representing Capital Stock of Bagdad to The Valley National Bank of Arizona, Phoenix, Arizona, the Exchange Agent for Cyprus, for surrender in exchange for certificates representing Common Stock of Cyprus.

No certificates for fractions of shares of Cyprus Common Stock and no scrip or other certificates evidencing fractional interests in such shares shall be issued. In lieu thereof if any fractional share of Cyprus Common Stock would be issuable to any holder of outstanding capital stock of Bagdad, such fraction will be purchased upon surrender of his shares of Bagdad as provided above for an amount in cash equal to the value of such fraction computed on the basis of the median between the high and low prices for Cyprus Common Stock on the New York Stock Exchange on the Effective Date of the Merger.

## COMPARATIVE PER SHARE DATA

The following table sets forth per share consolidated net income and stockholders' equity for Cyprus and its subsidiaries and for Bagdad and its subsidiaries as derived from consolidated financial statements of the respective corporations included elsewhere in this Joint Proxy Statement. Pro forma net income and stockholders' equity per share presented in the table are based upon the Pro Forma Combined Statement of Income and Pro Forma Condensed Combined Balance Sheet included elsewhere in this Joint Proxy Statement. Pro forma net income amounts are presented on a pooling of interests accounting basis. Should the transaction be required to be accounted for as a purchase (see page 17), there would be no difference in 1972 earnings.

### Cyprus Mines Corporation and Subsidiaries

	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>
Before merger:					
Income before extraordinary items.....	\$2.29	\$2.58	\$3.01	\$3.08	\$ 3.21
Extraordinary items.....	—	.33	—	—	—
Net income.....	<u>2.29</u>	<u>2.91</u>	<u>3.01</u>	<u>3.08</u>	<u>3.21</u>
Cash dividends.....	<u>\$ .70</u>	<u>\$ .70</u>	<u>\$ .80</u>	<u>\$1.00</u>	<u>\$ 1.00</u>
Shareholders' equity at December 31, 1972.....					<u>\$25.18</u>
Pro-forma — after merger (Note):					
Income before extraordinary items.....	\$2.20	\$2.42	\$2.93	\$2.79	\$ 2.98
Extraordinary items.....	—	.27	—	(.08)	—
Net income.....	<u>2.20</u>	<u>2.69</u>	<u>2.93</u>	<u>2.71</u>	<u>2.98</u>
Shareholders' equity at December 31, 1972:					
If deemed a pooling.....					<u>23.66</u>
If deemed a purchase.....					<u>26.37</u>

### Bagdad Copper Corporation and Subsidiaries

	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>
Before merger:					
Income before extraordinary items.....	\$2.13	\$1.98	\$3.03	\$1.73	\$ 2.31
Extraordinary items.....	—	—	—	(.55)	—
Net income.....	<u>2.13</u>	<u>1.98</u>	<u>3.03</u>	<u>1.18</u>	<u>2.31</u>
Cash dividends.....	<u>\$ .18</u>	<u>\$ .42</u>	<u>\$ .34</u>	<u>\$ .37</u>	<u>\$ .38</u>
Shareholders' equity at December 31, 1972.....					<u>\$19.92</u>
Pro-forma — after merger (Note):					
Income before extraordinary items.....	\$2.64	\$2.90	\$3.51	\$3.35	\$ 3.58
Extraordinary items.....	—	.33	—	(.10)	—
Net income.....	<u>2.64</u>	<u>3.23</u>	<u>3.51</u>	<u>3.25</u>	<u>3.58</u>
Cash dividends (Note).....	<u>\$ .84</u>	<u>\$ .84</u>	<u>\$ .96</u>	<u>\$1.20</u>	<u>\$ 1.20</u>
Shareholders' equity at December 31, 1972:					
If deemed a pooling.....					<u>28.39</u>
If deemed a purchase.....					<u>31.64</u>

Note: Pro forma amounts were determined by assuming 1.2 Cyprus shares are equivalent to 1 Bagdad share, or 1 Cyprus share is equivalent to .83⅓ Bagdad share.

Bagdad pro forma dividends are computed by multiplying Cyprus historical dividends by 1.2.

## CAPITALIZATION

The following table sets forth the capitalization of Cyprus and its subsidiaries and of Bagdad and its subsidiaries at December 31, 1972, together with their pro forma combined capitalization at that date, giving effect to the Merger and other transactions contemplated by the Agreement of Merger assuming no dissenters' rights are perfected:

<u>Title of Class</u>	<u>Cyprus</u>	<u>Bagdad</u>	<u>Pro Forma Combined</u>
Indebtedness:			
Long-term loans, principally for mine development.....	\$31,712,000(a) (d)	\$ 117,000	\$31,829,000
Short-term borrowing.....	3,000,000		3,000,000
Total indebtedness.....	<u>\$34,712,000</u>	<u>\$ 117,000</u>	<u>\$34,829,000</u>
Capital stock:			
Preferred shares, par value \$4 per share, authorized 1,000,000 shares.....	None		None
Common stock, par value \$4 per share, authorized 28,000,000 shares.....	8,969,000 shares(b)		10,899,207 shares(b)
Capital stock, par value \$2.50 per share, author- ized 4,800,000 shares.....		1,608,506 shares(c)	None

(a) See Note 6 of Cyprus' Notes to Financial Statements.

(b) Does not include 452,750 shares reserved for issuance under Cyprus stock option plans.

(c) Does not include 16,264 shares reserved for issuance pursuant to Bagdad stock options outstanding at December 31, 1972.

(d) Long-term loans at December 31, 1972:

	<u>Due in One Year</u>	<u>Due after One Year</u>
Owed by 60%-owned Anvil:		
7½ % bank loans, collateralized by First Mortgage Bonds, payable in United States dollars in semi-annual installments, with the final payment due September 30, 1975.....	\$9,000,000	\$11,000,000
7.2% Mortgage Bonds (subordinated) payable in 14,000,000 German Deutschmarks on December 31, 1975, with accrued interest compounded semi-annually.....	—	4,931,000
Other, principally 8½ % 25-year mortgages on townsite hous- ing units.....	114,000	4,253,000
Owed by 50.01%-owned Pima:		
Installment loans on land purchases from various parties, interest rates from 4% to 7% with final installments due from 7 to 9 years.....	322,000	2,092,000
	<u>\$9,436,000</u>	<u>\$22,276,000</u>

The amounts due after one year are payable approximately: 1974—\$7,421,000; 1975—\$9,356,000; 1976—\$437,000; 1977—\$442,000; and thereafter \$4,620,000.

## **TAX CONSEQUENCES OF THE MERGER**

An application has been made to the United States Internal Revenue Service for a ruling that the proposed Merger qualifies as a tax free reorganization pursuant to Sections 354, 361, 368(a)(1)(A), and 368(a)(2)(D) of the Internal Revenue Code of 1954, as amended (the "Code"). It is a condition to the consummation of the proposed Merger that such a ruling be obtained. If that ruling is obtained, and the Merger is consummated, the tax consequences of the Merger will be as follows:

(1) No gain or loss will be recognized by reason of the Merger either to Bagdad or to Cyprus, or to any stockholder of Bagdad who receives no cash or property other than stock in Cyprus in exchange for his shares of Bagdad pursuant to the Merger.

(2) The basis and holding period for the shares of Cyprus received by any stockholder of Bagdad in exchange for his shares of Bagdad pursuant to the Merger will be the same as the basis and holding period of such stockholder for his stock in Bagdad except as adjustments are required under Section 358 of the Code on account of any recognized gain as a result of the Merger.

(3) Cash received by any stockholder of Bagdad as a result of the Merger for and in lieu of fractional shares in Cyprus will be treated as received from the sale of said fractional shares, and any gain recognized on said sale will be treated as taxable gain on the sale or exchange of said fractional shares.

(4) The basis in the hands of Cyprus of the assets of Bagdad held by Cyprus after the merger will be the same as the basis of such assets in the hands of Bagdad before the merger (Section 362(b)).

In the case of any stockholder of Bagdad who elects to take cash for all of his shares in that corporation in lieu of participating in the Merger (see "Rights of Dissenting Shareholders", page 7), such amounts received shall be treated as received on the sale of said shares and any gain realized thereby will be treated as gain on a taxable sale or exchange by such stockholder of such shares.

## **RIGHTS OF DISSENTING SHAREHOLDERS**

### **Cyprus**

Cyprus has been advised by its counsel, Musick, Peeler & Garrett, that no shareholder of Cyprus has any dissenters' rights of appraisal under the laws of the State of New York.

### **Bagdad**

Section 10-347, Arizona Revised Statutes, sets out the rights of any Bagdad dissenting stockholder. Such section is set out in full in Exhibit B to this Proxy Statement and the following summary of the applicable statutory provisions is qualified in its entirety by reference to the foregoing section.

Any stockholder of Bagdad who votes to reject the Agreement of Merger, and who gives written notice of his dissent to the President, Secretary or statutory agent of Bagdad within two days after the meeting of its stockholders relative to the Agreement, will be entitled to receive in cash the fair value of his stock, based on its pro rata share of the fair value of the net assets of Bagdad as of the date of its stockholders meeting. In the event of disagreement as to value, a dissenting stockholder may, within thirty days after such stockholders meeting, commence an action to fix the value in the proper Arizona court. Under Arizona law, the successful party in a court action may be entitled to recover from his adversary his costs of suit. Every stockholder who fails to give notice of his dissent or, in the event of disagreement as to value, fails to commence a court action, as mentioned above, will be deemed to have consented to the merger. A negative vote on the merger will not be considered as constituting the aforementioned written notice of dissent. It is suggested that any such notice be

addressed to the Secretary of Bagdad, 55 East Thomas Road, Phoenix, Arizona 85012, in time to be received within two days after the date of the meeting of the Bagdad stockholders. Bagdad does not plan to give further notice to any Bagdad stockholder in regard to actions which may be required to perfect his rights of dissent. An affirmative vote on the merger would preclude a stockholder from later taking effective action to perfect such rights.

### MARKET PRICES OF CAPITAL STOCK

The following table sets forth for the periods shown, the range of market prices per share for the Common Stock of Cyprus on the New York Stock Exchange and for the Capital Stock of Bagdad on the American Stock Exchange:

Period	Common Stock of Cyprus		Capital Stock of Bagdad(2)	
	High	Low	High	Low
1971				
First Quarter.....	34 $\frac{7}{8}$ (1)	26 $\frac{7}{16}$ (1)	27.85	19.77
Second Quarter.....	42 $\frac{5}{8}$	32 $\frac{1}{2}$	28.75	25.16
Third Quarter.....	42 $\frac{3}{4}$	33 $\frac{7}{8}$	32.35	25.61
Fourth Quarter.....	36 $\frac{3}{4}$	25	27.12	20.89
1972				
First Quarter.....	38	30	39.50	26.42
Second Quarter.....	39 $\frac{3}{8}$	31	43.75	35.26
Third Quarter.....	33 $\frac{3}{8}$	29 $\frac{3}{4}$	36.79	32.90
Fourth Quarter.....	33 $\frac{3}{8}$	29 $\frac{3}{4}$	34.00	31.50
1973 (through 2/20/73).....	35 $\frac{1}{4}$	30 $\frac{1}{2}$	38 $\frac{5}{8}$	32 $\frac{3}{8}$

(1) Adjusted for 100% stock distribution in February, 1971.

(2) Adjusted for intervening stock dividends.

On February 20, 1973 the closing price per share of Cyprus Common Stock on the New York Stock Exchange was \$34 $\frac{3}{8}$ , and the closing price per share of Bagdad Capital Stock on the American Stock Exchange was \$38 $\frac{5}{8}$ , both as reported in the Pacific Coast edition of the *Wall Street Journal*. The closing price per share of Cyprus Common Stock on the New York Stock Exchange on January 15, 1973, the trading date immediately prior to the announcement of the Merger, was \$31 $\frac{7}{8}$ , and the closing price per share of Bagdad on the American Stock Exchange on that date was \$37 $\frac{7}{8}$ , both as reported in the Pacific Coast edition of the *Wall Street Journal*.

### DIVIDEND POLICIES

#### Cyprus

Cyprus paid a quarterly cash dividend of \$.15 per share each quarter from 1961 to 1966; a cash dividend of \$.175 per share each quarter from 1967 to 1969; a cash dividend of \$.20 per share each quarter in 1970; and a cash dividend of \$.25 per share each quarter in 1971 and 1972. The foregoing figures are adjusted for a 100% stock distribution in 1971.



The Board of Directors of Cyprus has stated its intention that, if the Merger becomes effective, the first dividend to be declared by it after the Effective Date of the Merger (Third Quarter Dividend) on the then issued and outstanding shares of Common Stock of Cyprus (including the shares issued in the Merger) will be in the amount of 25 cents per share. However, for the future, the Board reserved the right to increase or decrease the amount of the dividend or to eliminate it entirely in the event that presently unanticipated circumstances so indicate in the sole judgment of the Cyprus Board. The payment and amount of future dividends will be dependent upon future earnings and other relevant factors.

#### **Bagdad**

Bagdad has paid regular cash dividends for more than five years. In 1968 and 1969 quarterly dividends amounted to  $7\frac{1}{2}\phi$  per share, with an extra dividend of  $10\phi$  per share paid in 1969. From 1970 through the first quarter of 1973, Bagdad has paid quarterly dividends of  $10\phi$  per share with the exception of a fourth quarter dividend of  $9.6\phi$  in 1972. In addition, during the last five years, Bagdad has paid stock dividends of 5% in December 1968, 6% in November 1970, 5% in December 1971, and 6% in November 1972.

The Board of Directors of Bagdad declared its regular quarterly dividend of  $10\phi$  per share payable on May 10, 1973, to shareholders of record on April 10, 1973.

# CYPRUS MINES CORPORATION AND SUBSIDIARIES

## CONSOLIDATED STATEMENT OF INCOME

The following consolidated statement of income for Cyprus, insofar as it relates to the years 1970 through 1972, has been examined by Lybrand, Ross Bros. & Montgomery, independent certified public accountants, whose report with respect thereto, which is based in part on the report of other independent accountants is included elsewhere herein. The amounts indicated for the years 1968, 1969, 1970 and 1971 have been restated from those originally reported for the consolidation of Pima Mining Company and reclassification of deferred income taxes related to Marcona Corporation and subsidiary companies (see Note a). These statements should be read in conjunction with the other consolidated financial statements of Cyprus and notes thereto included elsewhere herein.

In Thousands Except per Share Amounts					
For the Year Ended December 31,					
	Not Covered by Accountants' Report				
	1968	1969	1970	1971	1972
Total revenues, including share of revenues of affiliated corporations.....	\$244,284	\$253,735	\$303,632	\$308,859	\$318,800
Income:					
Revenues from operations (a).....	162,664	169,327	202,458	203,222	225,348
Costs of operations.....	121,511	119,723	142,392	150,935	174,323
Gross profit from operations.....	41,153	49,604	60,066	52,287	51,025
Equity in earnings of affiliated corporations (a and b).....	8,329	9,738	10,196	12,725	10,366
Interest income and other dividends.....	909	1,627	2,428	2,311	988
Gross profit and other income....	50,391	60,969	72,690	67,323	62,379
Expenses:					
General and administrative.....	3,803	4,409	4,570	4,257	4,497
Mineral exploration.....	2,673	2,917	4,771	3,664	3,674
Interest.....	3,015	2,076	4,928	4,589	3,875
Other.....	(476)	(298)	54	(318)	(354)
Total expenses.....	9,015	9,104	14,323	12,192	11,692
Income before foreign and domestic income taxes, minority interests and extraordinary items....	41,376	51,865	58,367	55,131	50,687
Provision for foreign and domestic income taxes (a, b and e).....	12,499	19,189	20,300	16,792	10,327
Income before minority interests and extraordinary items.....	28,877	32,676	38,067	38,339	40,360
Minority interests in net income of consolidated subsidiaries.....	7,556	8,650	10,705	10,585	11,546
Income before extraordinary items.....	21,321	24,026	27,362	27,754	28,814
Extraordinary items (c).....		3,036			
Net income.....	\$ 21,321	\$ 27,062	\$ 27,362	\$ 27,754	\$ 28,814
Income per common share (d):					
Income before extraordinary items.....	\$2.29	\$2.58	\$3.01	\$3.08	\$3.21
Extraordinary items.....		.33			
Net income.....	\$2.29	\$2.91	\$3.01	\$3.08	\$3.21
Number of common shares used to compute income per common share (d).....	9,314	9,312	9,088	9,017	8,969
Cash dividends per common share (d).....	\$ .70	\$ .70	\$ .80	\$1.00	\$1.00

## CYPRUS MINES CORPORATION AND SUBSIDIARIES

### NOTES TO CONSOLIDATED STATEMENT OF INCOME

Information with respect to 1968 and 1969 is not covered by Accountants' Report

**(a) Restatements:**

During 1971 Cyprus' ownership in Pima Mining Company (Pima) was increased to 50.01% from 50% upon resolution of a difference concerning Cyprus' right to acquire an additional 1% of Pima's capital stock. In addition Cyprus received a dividend of \$1,000,000 from Pima which otherwise would have been received by the other stockholder. For comparative purposes the consolidated statement of income has been restated for all years prior to 1971 to reflect Pima as a consolidated subsidiary. This consolidation does not change previously reported net income of Cyprus and the operating revenues previously reported and those reported herein have been restated as follows, in thousands:

	1968	1969	1970
Revenues previously reported.....	\$113,003	\$113,465	\$141,769
Revenues of Pima.....	49,661	55,862	60,689
Revenues reported herein.....	<u>\$162,664</u>	<u>\$169,327</u>	<u>\$202,458</u>

In 1972 Cyprus' principal affiliate, Marcona Corporation (Marcona), retroactively adopted the policy of providing for deferred taxes on undistributed earnings of its foreign subsidiaries which are not indefinitely invested abroad. See Note 4 of Cyprus' Notes to Financial Statements elsewhere herein. This change resulted in a reclassification of amounts previously provided therefor by Cyprus from provision for income taxes to a reduction in equity in earnings of affiliated corporations:

1968.....	\$ 580,000
1969.....	1,302,000
1970.....	1,950,000
1971.....	3,450,000

**(b) Equity in earnings of affiliated corporations:**

Affiliated corporations which are owned 50% or less and which were formed to utilize joint resources and in which Cyprus' management participates on an active basis are accounted for on an equity basis. See Note 4 of Cyprus Notes to Financial Statements for additional information on this matter including a Peru tax assessment. The equity in earnings of affiliated corporations and the related provisions for deferred taxes were:

	1968	1969	1970	1971	1972
Increase in equity in undistributed earnings.....	\$ 6,478	\$ 7,438	\$ 7,392	\$ 8,450	\$ 5,400
Cash dividends from affiliated corporations.....	1,851	2,300	2,804	4,275	4,966
Equity in earnings of affiliated corporations..	<u>\$ 8,329</u>	<u>\$ 9,738</u>	<u>\$10,196</u>	<u>\$12,725</u>	<u>\$10,366</u>
Included in provisions for foreign and domestic income taxes — increase in provision for deferred taxes on undistributed earnings of affiliated corporations.....	<u>\$ 520</u>	<u>\$ 966</u>	<u>\$ 1,212</u>	<u>\$ 2,422</u>	<u>\$ 272</u>

**(c) Extraordinary items:**

The extraordinary items for 1969 represent a \$4,999,000 net gain on disposal of timber properties, including applicable tax credits, less \$1,963,000 provision for loss on disposal of inactive mineral properties.

**(d) Per share amounts:**

Per share amounts are based on the number of shares outstanding at the end of each of the years, restated to give effect to the 100% stock distribution in 1971.

# CYPRUS MINES CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED STATEMENT OF INCOME (Continued)

Information with respect to 1968 and 1969 is not covered by Accountants' Report

### (e) Income taxes:

The provision for foreign and domestic income taxes is summarized as follows, adjusted in 1971 and prior for the Marcona restatement:

	(Dollars in Thousands)				
	1968	1969	1970	1971	1972
Foreign income taxes:					
Currently payable.....	\$ 5,035	\$ 5,132	\$ 3,775	\$ 3,289	\$ 2,179
Deferred.....	658	2,621	730	398	781
	<u>\$ 5,693</u>	<u>\$ 7,753</u>	<u>\$ 4,505</u>	<u>\$ 3,687</u>	<u>\$ 2,960</u>
Federal income taxes:					
Currently payable.....	\$ 2,980	\$ 6,676	\$ 9,973	\$ 5,145	\$ 4,004
Deferred.....	2,943	3,506	4,319	6,501	2,176
	<u>\$ 5,923</u>	<u>\$10,182</u>	<u>\$14,292</u>	<u>\$11,646</u>	<u>\$ 6,180</u>
State income taxes.....	<u>\$ 883</u>	<u>\$ 1,254</u>	<u>\$ 1,503</u>	<u>\$ 1,459</u>	<u>\$ 1,187</u>
Total.....	<u>\$12,499</u>	<u>\$19,189</u>	<u>\$20,300</u>	<u>\$16,792</u>	<u>\$10,327</u>

Deferred taxes relate principally to timing differences associated with the deduction of depreciation, mine development costs and other expenses for income tax purposes. Cyprus applies the investment tax credit as a reduction of federal income taxes payable in the year earned. Application of investment tax credit reduced taxes by:

1968.....	\$141,000
1969.....	119,000
1970.....	32,000
1971.....	663,000
1972.....	500,000

Because of certain Canadian tax regulations, it is expected that a consolidated subsidiary, Anvil Mining Corporation, Limited, will pay no Canadian income taxes on its earnings for 1972 and prior years. Such earnings are considered to be permanently invested and no United States income taxes have been provided thereon.

The disproportionate relationship between pre-tax income and the provision for income tax is attributable to the following:

Use of statutory depletion.

Use of flow through method of recording investment credit.

The permanent difference for Canadian tax discussed in preceding paragraph.

Computing deferred income tax only on that portion of income of unconsolidated affiliates which is not considered as permanently invested.

### (f) Foreign earnings:

The consolidated statement of income includes income from foreign operations, as follows (in thousands):

	1968	1969	1970	1971	1972
Income before minority interests and extraordinary items.....	\$9,421	\$8,569	\$7,204	\$8,974	\$15,185
Net income.....	<u>\$9,421</u>	<u>\$8,569</u>	<u>\$7,249</u>	<u>\$7,283</u>	<u>\$10,838</u>

Revenues from operations in 1972 increased \$22,126,000 over 1971, while costs of operations in 1972 increased \$23,388,000 with a resultant decrease in gross profit from operations in 1972 of \$1,262,000.

Revenues of Pima Mining Company and Anvil Mining Corporation Limited increased \$5,058,000 and \$11,962,000 respectively, and together accounted for 77% of the total increase. The increase by Pima was related to increased volume of copper sales resulting from the opening of expanded mill facilities in February 1972, which raised daily rated capacity from 39,500 tons to 53,500 tons. This expanded production was offset by lower copper prices and lower molybdenum volume and prices. Anvil's increase was the result of higher quantities of all metals sold at significantly improved prices. Increased quantities were achieved as the result of increased production and reduction of inventory permitting increased sales to regular customers as well as spot sales to others.

The increase in costs of operations is also primarily attributable to Pima and Anvil where increases of \$11,333,000 and \$5,937,000, respectively, were recorded, or 74% of the total. The Pima cost increase relates to operations of the expanded mill, higher labor rates, increased depreciation on the new mill and sharply higher amortization of pre-production stripping costs related to the recognition of higher ore reserves in 1972. The total Anvil cost increase is directly related to the increased sales and production.

The Mount Goldsworthy operation in Australia recorded decreased gross profit of \$1,291,000 resulting from decreased sales occasioned by options available to Japanese customers combined with slightly higher costs.

The variations in revenues and costs of all other operations were lesser in amount and were mostly offsetting in their effect on gross profit.

Revenues from operations in 1971 increased \$764,000 over 1970 whereas costs of operations increased \$8,543,000 for the same period, resulting in lower gross profit from operations in 1971 of \$7,779,000 when compared to 1970.

Increased revenues of Anvil Mining Corporation Limited of \$11,737,000 were offset by lower revenues of Pima Mining Company and Cyprus Island Division of \$4,205,000 and \$7,565,000, respectively. The increase by Anvil was the direct result of a 40% increase in the volume of lead and zinc sales over 1970, the first year of operation, which was hampered by start-up problems. The drop in Pima's revenues was due to a reduction in the average price of copper sold of 9.2¢ per pound, a 15% decrease, which more than offset increased copper sales volume. Cyprus Island Division revenues declined primarily due to lower copper prices, which averaged 14.8¢ per pound, or 23%, below 1970 prices; also the volume of products sold was lower.

Increases in costs of operations were recorded by Anvil \$6,725,000, Pima \$3,233,000 and Mount Goldsworthy Division \$1,237,000; these increases were offset by lower costs for the Cyprus Island Division in the amount of \$4,077,000. The net increase of these operations accounts for 83% of the total increase in operating costs. Anvil's increase is directly related to the increased sales and production. Pima's cost increase is related to the higher volume of sales and production and to higher labor rates effective September 1, 1971. Cost increases at the Mount Goldsworthy operation in Australia were related to nominally higher sales volumes, increased wage rates and exchange losses. The decrease in operating costs of Cyprus Island resulted primarily from a lower level of operation in 1971 coupled with the inclusion in 1970 costs of the write-down of uneconomic ore reserves and obsolete supplies inventories.

The variation in revenues and costs of all other operations was lesser in amount and significance in their effect on gross profit.

# BAGDAD COPPER CORPORATION

## CONSOLIDATED STATEMENT OF INCOME

The following statement has been examined by Price Waterhouse & Co., independent accountants, whose report thereon appears elsewhere in this Proxy Statement. The statement should be read in conjunction with the other consolidated financial statements of Bagdad and notes thereto included elsewhere in this Proxy Statement.

	Year ended December 31				
	1968	1969	1970	1971	1972
	(Stated in thousands of dollars)				
Income:					
Sales of basic metals.....	\$16,112	\$15,702	\$18,243	\$18,153	\$23,038
Sales of manufactured products.....	5,099	5,980	5,080	7,909	9,463
Interest and other income.....	229	442	463	270	358
	<u>21,440</u>	<u>22,124</u>	<u>23,786</u>	<u>26,332</u>	<u>32,859</u>
Costs and expenses:					
Cost of sales excluding depreciation, depletion and amortization —					
Basic metals.....	7,454	7,726	6,812	7,758	11,984
Manufactured products.....	4,062	4,524	3,537	6,407	7,283
Selling, general and administrative expenses.....	3,218	3,663	4,307	5,143	6,204
Depreciation, depletion and amortization (Note A).....	1,286	1,296	1,732	2,029	1,848
Joint venture (income) loss.....	272	(34)	14		
Loss from discontinued operations (Note B)....			95	796	
	<u>16,292</u>	<u>17,175</u>	<u>16,497</u>	<u>22,133</u>	<u>27,319</u>
Income before provision for taxes and extraordinary charge.....	5,148	4,949	7,289	4,199	5,540
Provision for income taxes (Notes B and C).....	1,750	1,793	2,452	1,438	1,823
Income before extraordinary charge.....	3,398	3,156	4,837	2,761	3,717
Loss on investment in and advances to Hurricane Car Wash Systems, Inc. (Note B).....				880	
Net income.....	<u>\$ 3,398</u>	<u>\$ 3,156</u>	<u>\$ 4,837</u>	<u>\$ 1,881</u>	<u>\$ 3,717</u>
Earnings per share of capital stock (Note D):					
Income before extraordinary charge.....	\$2.13	\$1.98	\$3.03	\$1.73	\$2.31
Extraordinary charge.....				.55	
Net income.....	<u>\$2.13</u>	<u>\$1.98</u>	<u>\$3.03</u>	<u>\$1.18</u>	<u>\$2.31</u>
Cash dividends per share of capital stock (Note D)..<	<u>\$ .18</u>	<u>\$ .42</u>	<u>\$ .34</u>	<u>\$ .37</u>	<u>\$ .38</u>

The immediately following notes are an integral part of this Statement.

# BAGDAD COPPER CORPORATION

## NOTES TO CONSOLIDATED STATEMENT OF INCOME

NOTE A — In 1967 the Company changed its accounting for mine development (stripping) costs from the deferral method to current charges against operations. In prior years such deferred costs were amortized on the basis of tons of ore mined. The unamortized balance of mine development costs at January 1, 1967 was charged to operations over five years at the rate of approximately \$325,000 per year, which charge is included in depreciation, depletion and amortization for the years 1968 through 1971.

NOTE B — In October 1970, Bagdad acquired 41% of the outstanding stock of Hurricane Car Wash Systems, Inc.; during 1971, an additional 27% was acquired. The Company concluded in 1971 that its investment in and advances to Hurricane Car Wash Systems, Inc. will not be realized and accordingly charged these amounts against 1971 net income as follows:

	<u>Amount</u>	<u>Per share</u>
Charged to income before extraordinary charge (loss from discontinued operations) —		
Hurricane's losses for the nine months ended September 30, 1971 (net of intercompany profits of \$102,000).....	\$ 491,000	\$ .31
Amount due Garland Steel for manufacturing activities prior to October 1970 — net of credit of \$305,000 given Hurricane for purchase of inventory.....	305,000	.19
	<u>796,000</u>	<u>.50</u>
Charged as extraordinary charge —		
Investment in and advances subsequent to October 1970, net of amounts charged to income before extraordinary charge.....	880,000	.55
	<u>\$1,676,000</u>	<u>\$1.05</u>

Losses from discontinued operations for the two years ended December 31, 1971 include:

	<u>1970</u>	<u>1971</u>
Gross income.....	\$125,000	\$1,382,000
Less-Operating expenses.....	220,000	1,873,000
Amount due Garland Steel.....		305,000
	<u>\$ 95,000</u>	<u>\$ 796,000</u>

Tax benefits of \$305,000 (\$.19 per share) in 1971 attributable to the loss have been given effect in the provision for income taxes. Additional tax benefits in the amount of \$497,000 (\$.31 per share) were claimed for income tax purposes. The realization of these benefits is uncertain and no benefit was taken for financial reporting purposes.

NOTE C — The provision for income taxes consists of the following:

	<u>Year ended December 31</u>				
	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>
	(Stated in thousands of dollars)				
Federal —					
Currently payable.....	\$1,518	\$1,537	\$2,351	\$ 603	\$1,539
Investment tax credits.....	(68)	(27)	(369)	(22)	(45)
Deferred.....			45	655	24
	<u>1,450</u>	<u>1,510</u>	<u>2,027</u>	<u>1,236</u>	<u>1,518</u>
State.....	300	283	425	202	305
	<u>\$1,750</u>	<u>\$1,793</u>	<u>\$2,452</u>	<u>\$1,438</u>	<u>\$1,823</u>



## BAGDAD COPPER CORPORATION

### NOTES TO CONSOLIDATED STATEMENT OF INCOME (Continued)

NOTE D — Earnings per share of capital stock are based on the number of shares of capital stock outstanding at the end of each year, after giving retroactive effect to the 5%, 6%, 5% and 6% stock distributions to stockholders in 1968, 1970, 1971 and 1972, respectively. Cash dividends per share are based on dividends as declared retroactively adjusted for the stock dividends distributed noted above.

NOTE E — Sales by product line consists of the following:

	Year ended December 31				
	1968	1969	1970	1971	1972
	(Stated in thousands of dollars)				
Basic metals:					
Copper products —					
Concentrates.....	\$ 8,844	\$ 7,610	\$10,573	\$ 8,193	\$10,590
Precipitates.....	3,480	3,201	10		
Cathodes.....	855		2,146	5,657	7,893
Copper powder.....	1,890	4,090	4,781	3,520	3,888
Molybdenum concentrates.....	933	720	648	723	590
Silver.....	110	81	85	60	77
	<u>\$16,112</u>	<u>\$15,702</u>	<u>\$18,243</u>	<u>\$18,153</u>	<u>\$23,038</u>
Manufactured products:					
Steel (net of intercompany sales of \$56,000, \$35,000, \$1,411,000, \$68,000 and \$38,000, respectively).....	\$ 4,999	\$ 5,668	\$ 4,542	\$ 7,316	\$ 8,734
Plastics.....	100	312	538	593	729
	<u>\$ 5,099</u>	<u>\$ 5,980</u>	<u>\$ 5,080</u>	<u>\$ 7,909</u>	<u>\$ 9,463</u>

In the opinion of Bagdad's management, the increased sales in 1972 over 1971 are primarily due to sales from abnormal amounts of inventory accumulated in 1971 caused by a nationwide copper strike in 1971 (which did not shut down Bagdad's operations although it did shut down domestic smelters to which Bagdad sells its concentrates) and the further development of cathode markets which began in late 1970. Net income increased because of the higher sales volume (a large portion of which was cathode copper, a low cost product) offset to a lesser extent by increased operating costs and a slightly lower sales price.

Copper prices declined significantly in 1971 over 1970 levels. The price decline more than offset increased production some of which accumulated in higher than normal inventory levels due to the copper strike.

Higher copper prices in 1970 than in previous years contributed materially to the increase in both sales and net income in 1970 while other expenses remained relatively stable.

## PRO FORMA FINANCIAL STATEMENTS

It is the intention of Cyprus to treat this combination as a pooling of interests for accounting purposes. In order for Cyprus to accomplish their intention, a minimum of 90% of the outstanding Bagdad shares must be exchanged for Cyprus stock. Furthermore, no affiliate of either Cyprus or Bagdad may sell shares in either Company before at least 30 days of post combination operating results have been published, anticipated to be about July 16, 1973.

Cyprus considers that if the proposed merger with Bagdad were required to be accounted for as a purchase, the Company will allocate the purchase price in accordance with Accounting Principles Board Opinion No. 16. If any portion of the purchase price cannot be allocated to the existing properties, such excess would be allocated to an intangible asset and amortized over not more than 40 years in accordance with the criteria set forth in Accounting Principles Board Opinion 17. Cyprus considers the current carrying value of Bagdad's assets, other than undeveloped copper ore reserves, are stated at their approximate fair value. Therefore, in the accompanying Pro Forma Condensed Combined Balance Sheets prepared on a purchase basis, the currently undeveloped copper ore reserves have been allocated a purchase price of approximately \$30,482,000 in excess of Bagdad carrying values.

No Purchase Pro Forma Statement of Income has been provided for the combination for the year ended December 31, 1972 because the excess of purchase price over the carrying value of the Bagdad assets has been allocated to undeveloped ore reserves of Bagdad and therefore they have no effect on that year's earnings. However, in subsequent years as the ore reserves are mined, income will be adversely affected by the amount of ore depletion required to be recognized as a cost for financial statement purposes which is attributable to the purchase price assigned to the ore reserves.

### CYPRUS MINES CORPORATION AND SUBSIDIARIES PRO FORMA COMBINED STATEMENT OF INCOME (Unaudited)

The following Pro Forma Combined Statement of Income combines the Consolidated Statements of Income of Cyprus and subsidiaries with Bagdad for the five years ended December 31, 1972 on a pooling-of-interests basis as if all Bagdad outstanding capital shares had been exchanged for Cyprus common stock. (See comments above.) This Pro Forma Statement should be read in conjunction with the Notes to the Pro Forma Combined Statement of Income and the consolidated financial statements of the respective companies, their related notes and the accountants' reports thereon appearing elsewhere in this Joint Proxy Statement.

(In Thousands Except Per Share Amounts)

	1968	1969	1970	1971	1972
Total revenues, including shares of revenues of affiliated corporations.....	\$265,495	\$275,417	\$326,955	\$334,921	\$351,301
Income:					
Revenues from operations.....	183,875	191,009	225,781	229,284	257,849
Costs of operations.....	134,312	133,270	154,472	167,129	195,439
Gross profit from operations.....	49,563	57,739	71,309	62,155	62,410
Equity in earnings of affiliated corporations.....	8,057	9,772	10,182	12,725	10,366
Interest income and other dividends.....	1,138	2,069	2,891	2,581	1,346
Gross profit and other income.....	58,758	69,580	84,382	77,461	74,122
Expenses:					
General and administrative.....	7,022	8,071	8,877	9,400	10,701
Mineral exploration.....	2,673	2,917	4,771	3,664	3,674
Interest.....	3,015	2,076	4,928	4,589	3,875
Other.....	(476)	(298)	150	478	(354)
Total expenses.....	12,234	12,766	18,726	18,131	17,896
Income before foreign and domestic income taxes, minority interests and extraordinary items.....	46,524	56,814	65,656	59,330	56,226
Provision for foreign and domestic income taxes (Note 1).....	14,249	20,982	22,752	18,230	12,149
Income before minority interests and extraordinary items.....	32,275	35,832	42,904	41,100	44,037
Minority interests in net income of consolidated subsidiaries.....	7,556	8,650	10,705	10,585	11,546
Income before extraordinary items.....	24,719	27,182	32,199	30,515	32,531
Extraordinary items.....	—	3,036	—	(880)	—
Net income.....	\$ 24,719	\$ 30,218	\$ 32,199	\$ 29,635	\$ 32,531
Net income per common share:					
Income before extraordinary items.....	\$ 2.20	\$ 2.42	\$ 2.93	\$ 2.79	\$ 2.98
Extraordinary items.....	—	.27	—	(.08)	—
Net income.....	\$ 2.20	\$ 2.69	\$ 2.93	\$ 2.71	\$ 2.98
Shares outstanding at end of year.....	11,228	11,225	11,004	10,932	10,899

1. Pro forma income taxes as reflected above represent the total of income taxes actually provided by Cyprus and Bagdad.
2. The Company estimates that the expenses of the merger will be \$1,000,000 which will be charged to expense during 1973 if the transaction is accounted for as a pooling-of-interests.

**CYPRUS MINES CORPORATION AND SUBSIDIARIES**  
**PRO FORMA CONDENSED COMBINED BALANCE SHEETS**  
**(Unaudited)**

The following pro forma condensed combined balance sheets have been prepared by combining the December 31, 1972 consolidated balance sheets of Cyprus and Bagdad on (I) a pooling-of-interests accounting basis and (II) a purchase accounting basis (see notes below). These statements should be read in conjunction with the accompanying notes and the consolidated financial statements, including the notes thereto, of the respective companies which appear elsewhere in this Joint Proxy Statement.

(In Thousands)

**A S S E T S**

	Cyprus Consolidated	Bagdad Consolidated	Pro Forma Pooling-of- Interests (100% Acquired)		Pro Forma Purchase (If 100% Acquired)	
			Adjustments	Combined	Adjustments	Combined
Current assets:						
Cash and marketable securities	\$ 4,468	\$ 8,186		\$ 12,654		\$ 12,654
Accounts receivable.....	30,113	5,498		35,611		35,611
Inventories.....	40,875	2,468		43,343		43,343
Supplies and prepaid expenses..	8,322	2,233		10,555		10,555
Total current assets.....	<u>83,778</u>	<u>18,385</u>		<u>102,163</u>		<u>102,163</u>
Investment in Bagdad Copper Corporation.....					\$ 61,525 (2) (61,525) (3)	—
Property, plant and equipment, net of depreciation and deple- tion.....	176,883	17,140		194,023		194,023
Undeveloped Mineral Properties (Note 6).....	1,534			1,534	29,482 (3) 1,000 (4)	32,016
Investments in and advances to affiliated corporations.....	91,238			91,238		91,238
Other assets.....	15,423	1,537		16,960		16,960
Total assets.....	<u>\$368,856</u>	<u>\$37,062</u>		<u>\$405,918</u>	<u>\$ 30,482</u>	<u>\$436,400</u>

**LIABILITIES AND SHAREHOLDERS' EQUITY**

Current liabilities:						
Short-term borrowing and cur- rent portion of long-term loans.....	\$ 12,436			\$ 12,436		\$ 12,436
Accounts payable and accrued liabilities.....	21,730	\$ 2,566		24,296	\$ 1,000 (4)	25,296
Foreign and domestic income taxes.....	5,757	1,572		7,329		7,329
Dividends payable.....		161		161		161
Total current liabilities....	<u>39,923</u>	<u>4,299</u>		<u>44,222</u>		<u>45,222</u>
Long-term loans.....	22,276	117		22,393		22,393
Deferred income taxes.....	36,117	603		36,720		36,720
Minority interests in subsidiaries..	44,690			44,690		44,690
Shareholders' equity (5):						
Common (Cyprus), Capital (Bagdad) shares.....	35,876	4,021	\$ 7,721 (1) (4,021) (1)	43,597	7,721 (2) (4,021) (3)	43,597
Capital surplus.....	73	9,426	(3,700) (1)	5,799	53,804 (2) (9,426) (3)	53,877
Retained earnings.....	189,901	18,596		208,497	(18,596) (3)	189,901
Total shareholders' equity	<u>225,850</u>	<u>32,043</u>		<u>257,893</u>	<u>29,482</u>	<u>287,375</u>
Total liabilities and share- holders' equity.....	<u>\$368,856</u>	<u>\$37,062</u>	<u>—</u>	<u>\$405,918</u>	<u>\$ 30,482</u>	<u>\$436,400</u>

Notes:

It is the intention of Cyprus to utilize the pooling of interests basis for financial reporting purposes if the transactions contemplated by the Agreement of Merger qualify for such basis.

Explanation of pro forma condensed combined balance sheets adjustments:

- (1) Pooling-of-interests — To reflect the issuance of 1,930,207 Cyprus shares for all the outstanding Bagdad shares at December 31, 1972 (at the rate of 1.2 Cyprus shares for each outstanding Bagdad share), to eliminate the Bagdad capital share account in consolidation and adjust capital surplus.
- (2) Purchase — To reflect the issuance of 1,930,207 Cyprus shares at \$31.875 per share (the closing price on the New York Stock Exchange on January 15, 1973, the trading date immediately prior to the announcement of the merger) in exchange for 100 per cent of the December 31, 1972 outstanding Bagdad shares (1,608,506 shares) at the rate of 1.2 Cyprus shares for each Bagdad share.
- (3) Purchase — To eliminate the Bagdad shareholders' equity accounts against the investment in Bagdad recorded in adjustment (2) and assign the excess of purchase price to undeveloped mineral properties.
- (4) To record estimated cost of acquisition as additional undeveloped mineral properties.
- (5) Shares issued before and after business combination:

	Before		After	
	<u>Authorized</u>	<u>Issued</u>	<u>Authorized</u>	<u>Issued</u>
Cyprus Mines Corporation:				
Preferred stock, par value \$4 per share.....	1,000,000	—	1,000,000	—
Common stock, par value \$4 per share.....	28,000,000	8,969,000	28,000,000	10,899,207
Bagdad Copper Corporation:				
Capital stock.....	4,800,000	1,608,506	—	—

- (6) Not more than \$500,000 of Bagdad's carrying value is attributable to undeveloped mineral properties which properties have not been segregated in Bagdad's books.

## BUSINESS AND PROPERTIES OF CYPRUS

### Introduction

Cyprus Mines Corporation (hereinafter in this section called the "Company") is engaged directly and through its subsidiaries and affiliated companies in the production and marketing of a diverse group of metallic minerals including copper, lead, zinc, iron ore, silver, and molybdenum; ocean transportation of iron ore and other basic commodities; the production, processing and marketing of non-metallic minerals, including premium grade talc, kaolin, clays, and cement; and in the manufacture and marketing of wire cable, tubing and related products for the electrical industry.

The Company operates principally through wholly-owned divisions and corporations in which it has a majority interest and management control. There are three exceptions: (1) Marcona Corporation, which is engaged in iron ore mining and shipping, is owned 50% by Cyprus as to voting stock and 46% as to equity; (2) Mount Goldsworthy Mining Associates, in which the Company owns an undivided one-third interest in the iron ore reserves in Western Australia and participates equally with Consolidated Gold Fields Australia and Utah Development Company in the ownership and management of Goldsworthy Mining Limited, the contract mining company; and (3) Hawaiian Cement Corporation, in which the Company owns a 45.4% interest and for which one of the Company's officers is Chairman of the Board of Directors.

The products of Cyprus Mines Corporation and the 1968-1972 revenues derived therefrom are listed in the following tabulation:

### 1968-1972 Revenues by Products

	(Dollars in Thousands)				
	1968	1969	1970	1971	1972
Total revenues, including share of revenues of affiliated corporations:					
Non-ferrous minerals.....	\$ 43,249	\$ 48,478	\$ 66,980	\$ 63,612	\$ 72,338
Iron ore mining.....	80,884	83,544	94,920	89,250	89,596
Ocean transportation.....	10,758	9,469	18,463	28,322	15,344
Industrial minerals and pigments.....	15,523	18,477	18,440	18,014	19,967
Electrical products.....	57,697	55,462	61,258	62,615	68,194
Timber and other divested properties....	10,170	7,871	—	—	—
Other.....	1,091	2,406	2,859	3,924	2,997
	<u>\$219,372</u>	<u>\$225,707</u>	<u>\$262,920</u>	<u>\$265,737</u>	<u>\$268,436</u>
Add minority share of consolidated subsidiaries eliminated from above.....	24,912	28,028	40,712	43,122	50,364
Total.....	<u>\$244,284</u>	<u>\$253,735</u>	<u>\$303,632</u>	<u>\$308,859</u>	<u>\$318,800</u>
Gross profit and other income:					
Non-ferrous minerals.....	\$ 21,413	\$ 24,449	\$ 26,994	\$ 22,830	\$ 22,668
Iron ore mining.....	14,046	13,893	15,526	9,861	10,585
Ocean transportation.....	2,934	4,774	8,456	13,903	6,090
Industrial minerals and pigments.....	1,869	3,005	2,796	2,542	3,637
Electrical products.....	(541)	1,194	5,273	4,129	4,292
Timber and other divested properties.....	2,616	2,554	—	—	—
Other.....	775	1,381	(13)	926	(193)
	<u>\$ 43,112</u>	<u>\$ 51,250</u>	<u>\$ 59,032</u>	<u>\$ 54,191</u>	<u>\$ 47,079</u>
Less tax provisions by affiliated corporations	(3,766)	(4,176)	(5,674)	(4,361)	(1,399)
Add minority share of consolidated subsidiaries eliminated from above.....	11,045	13,895	19,332	17,493	16,699
Total.....	<u>\$ 50,391</u>	<u>\$ 60,969</u>	<u>\$ 72,690</u>	<u>\$ 67,323</u>	<u>\$ 62,379</u>

General and administrative expenses, mineral exploration and interest can not be allocated by lines of business.

## Non-Ferrous Minerals Group

The Company's non-ferrous minerals group includes the Pima and Bruce mines in Arizona, the Anvil mine in the Yukon Territory of Canada, and the Cyprus Island operation.

### *Pima Mining Company*

Pima Mining Company, which has been managed by Cyprus Mines Corporation since its initial development in the mid-1950's, is a California corporation 50.01% owned by Cyprus. While essentially a producer of copper in the form of copper concentrates, Pima also recovers minor amounts of molybdenite (a molybdenum sulphide) concentrates and silver. In 1972, the open pit copper mine and concentrator, located some 25 miles south of Tucson, Arizona, produced in concentrates 159 million marketable pounds of copper, 908,301 marketable ounces of silver, and 1,021,000 pounds of molybdenum contained in the molybdenite concentrates.

Pima's mining properties consist of 34 patented mining claims on United States Government land and seven mining leases from the State of Arizona. Three of the mining leases are for terms expiring in November 1990 and the remaining four mining leases are for terms expiring in September 1991. The leases call for a royalty of 5% of the net value of the minerals produced from the leased lands. Production from the patented mining claims is royalty-free. Approximately 71% of Pima's proven ore reserves is in lands covered by the patented mining claims and the remaining 29% of such reserves is within the lease areas. Ore reserves which could be mined and processed commercially at current copper prices and operating costs at December 31, 1972, were 241,019,000 short tons (2,000 pounds) averaging approximately .50% copper content.

Copper concentrates are shipped to two Arizona smelters for smelting and refining under long-term contracts. About half of the refined copper and the silver are returned to Pima for sale through normal channels while the balance of the copper is sold to one of the smelters and the balance of the silver to the other smelter. Molybdenite concentrates are sold in the open market.

Pima has not incurred any direct cost for compliance with environmental regulations. It is difficult to estimate the cost to comply in future years, although there is the possibility of a contribution of from two cents to six cents per pound of copper to a smelter depending on the requirements of the Pollution Control Board; in this event the cost per year would range from three million to nine million dollars.

A 35% expansion of facilities at Pima was completed during the first quarter of 1972. For the year as a whole, the mill processed an average of 51,200 tons of the ore per day, a 28% increase over 1971.

Mine operations over the past five years are summarized as follows:

	(In thousands except copper grade)				
	1968	1969	1970	1971	1972
<b>PRODUCTION</b>					
Tons ore milled.....	13,060	14,104	14,598	14,617	18,698
Grade % of copper.....	.583	.543	.541	.537	.525
Products obtained:					
Copper concentrates (pounds of marketable copper contained).....	122,963	129,515	127,371	129,083	158,935
Molybdenum concentrates (pounds of molybdenum contained).....	1,446	1,721	1,480	1,429	1,021
Silver ounces.....	724	715	634	675	908
<b>SALES STATISTICS</b>					
Volume sold:					
Copper pounds.....	127,609	134,288	112,741	128,513	151,034
Molybdenum pounds.....	1,485	1,721	1,480	1,173	243
Silver ounces.....	637	638	353	778	814

### *Anvil Mining Corporation*

Anvil Mining Corporation Limited ("Anvil") is a British Columbia corporation 60%-owned by the Company. Anvil operates an open pit lead and zinc mine and concentrator in the Yukon Territory of Canada. It completed its third full year of production in 1972.

In 1972, Anvil produced lead concentrates containing 194,536,000 pounds of lead and 2,168,046 ounces of silver, zinc concentrates containing 216,203,000 pounds of zinc, and bulk concentrates containing 32,862,000 pounds of lead, 49,583,000 pounds of zinc, and 428,286 ounces of silver. Concentrates are sold on the basis of London Metal Exchange quotations for lead and the European Producer Price for zinc.

Anvil's concentrates are sold principally to customers in Japan and West Germany under sales agreements extending to 1977. Due to agreed reductions in shipments to the Japanese in 1972, 4,500 dry metric tons of lead concentrates were sold in the United States and 10,500 in Africa. The Japanese customers have agreed to take their full contractual commitment of both lead and zinc concentrates in 1973, but with 10% thereof to be delivered in 1974.

Anvil holds approximately 1,500 mineral claims. Mineral leases were granted in 1967 on 560 acres of the claims area. Mineral leases from the Canadian Government are for a term of 21 years and will be renewable for another 21 years prior to expiration. A 30-year renewable surface lease of approximately 6,500 acres, covering the open pit mine, plant, and other facilities, was also granted in 1967. Ore reserves which could be mined and processed commercially at current lead and zinc prices and current operating costs at December 31, 1972, were 55,498,000 tons averaging 3.24% lead and 5.62% zinc, with 1.1 ounces of silver per ton.

Plant and operational improvements during 1972 resulted in the concentrator throughput averaging 7,940 tons per day at a grade of 4.61% lead and 6.42% zinc. In January 1973 plans were approved for the expansion of the concentrator to compensate for a decrease in feed grade which will occur in 1974 because the grade of the remaining ore reserves (3.19% lead and 5.55% zinc) is lower than the ore reserves which have been mined during the prior three years. It is estimated that this expansion will be completed in 1974 at a cost of \$5,000,000. Anvil expects to obtain the five million dollars required from its cash generation from earnings and non-cash charges for depreciation and amortization of development costs.

Mine operations over the past four years are summarized as follows:

	(In Thousands except grade)				
	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>
	(a)	(a)			
Ore milled — short tons.....		435	1,961	2,673	2,906
Grade of ore milled					
Lead.....		3.5%	4.4%	4.92%	4.63%
Zinc.....		5.6	6.4	6.79	6.22
		<u>9.1%</u>	<u>10.8%</u>	<u>11.71%</u>	<u>10.85%</u>
Total marketable metal produced					
Pounds of lead.....		21,670	120,355	204,419	212,445
Pounds of zinc.....		25,803	138,799	210,946	219,255
Ounces of silver.....		234	1,417	2,429	2,379
Total metal sold					
Pounds of lead.....		8,125	126,503	183,844	207,134
Pounds of zinc.....		10,316	142,517	193,803	229,365
Ounces of silver.....		95	1,498	2,208	2,403

(a) Anvil was in the development stage in 1968 and 1969. Production in 1969 was primarily for plant tune-up, therefore operating costs were capitalized and revenues were credited to capital costs.

### *Cyprus Island Division*

In Cyprus, the Company operates open pit mines, a concentrator, and a pressure leach plant. The orebodies are held under leases from the Government of Cyprus. Ore is presently being mined from two open pits near Skouriotissa and Lefka. The ore is transported by rail to the concentrator at Morphou Bay. The copper products — copper concentrates consisting of approximately 20% copper and copper precipitates of approximately 70% copper — are sold under a long-term contract to an established customer in West Germany. Copper sales are priced at London Metal Exchange quotations, and some 20.5 million pounds were produced in 1972.

Pyrites, containing some 47% sulfur, are a Cyprus Island Division by-product and are sold to sulfuric acid manufacturers in Europe and Turkey. Approximately 421,656 tons were produced during 1972. There is no assurance of the continuance of the present rate of production or sales.

Though Cyprus Island high-grade ore reserves have now been almost depleted, development of a low grade copper orebody near Skouriotissa — begun during 1972 — is expected to permit operations to continue for another four to five years at the rate of 900,000 tons per year. Profits, if any, will be at relatively low levels as the ore averages only about 0.9% copper.

The Cyprus Island Division is not considered a material asset of the Company or a foreseeable material contributor to the total revenues of the Company.

### *Bruce Mine Division*

The Company's Bruce mine is a small, relatively high-grade, underground mine with a mill and supporting facilities, located near Bagdad, Arizona. The property is secured by patented mining claims on United States Government land.

During 1972, 96,211 tons of ore assaying 3.92% copper and 13.7% zinc were mined and milled, producing concentrates which contained 6.8 million pounds of copper and 21.2 million pounds of zinc. Copper concentrates are shipped to a domestic smelter for conversion under a smelting and refining agreement. Zinc concentrates being produced in 1973 are being stockpiled while negotiations continue to secure a smelter outlet. Sales prices of copper and zinc are based on domestic market quotations. Recognized ore reserves (those which the Company's staff engineers estimate could be mined and processed commercially at current copper and zinc prices and operating costs) are sufficient for approximately five years of operations at the present mill rate at essentially the same grades.

The Bruce Mine Division is not considered a material asset of the Company or a foreseeable material contributor to the total revenues of the Company.

### **Industrial Minerals and Pigments Group**

Cyprus Mines Corporation's industrial minerals and pigments group is a leading producer of non-metallic minerals and specialty pigments. The Company's United Sierra Division mines, processes, blends and markets throughout the world a comprehensive line of talcs and clays. The Company also has a 45.4% interest in Hawaiian Cement Corporation, a 2.5 million barrel capacity cement company in Hawaii.

### *United Sierra Division*

Talcs and clays are mined by the Company's wholly owned United Sierra Division from Company-owned properties in Montana, Texas, California, Georgia, South Carolina, Tennessee and Maryland. Reserves of all of the important types of talc and clay are considered more than adequate to sustain existing levels of operations for at least 15 years and, in most cases, will permit expansion as demand warrants. Appropriate exploration and acquisition programs to increase reserves are in effect where necessary.



Talc processing plants are located in Three Forks, Montana; Grand Island, Nebraska; Los Angeles and Keeler, California; and Ghent, Belgium. Clay processing plants are located in Jeffersonville, Sandersville and Kaolin, Georgia; Gleason, Tennessee; and Aiken, South Carolina.

The pulp and paper, paint, ceramic, plastic, rubber, cosmetic and agricultural industries represent the major markets for the products of the United Sierra Division. Sales are handled through the Company's professional-technical sales force plus a network of qualified distributors. Research, product development and technical support to marketing are furnished by a modern research and laboratory facility located near Princeton, New Jersey.

#### *Hawaiian Cement Corporation*

Hawaiian Cement Corporation's plant is located near Honolulu, Hawaii, and produces Portland cement, limestone aggregate and calcium silicate (a soil conditioner). The limestone reserve is adequate for 40 years of production at the current rate of production. Cement is marketed throughout the Island chain to ready-mix and other concrete producers. Calcium silicate is marketed to sugar plantations. An expansion program was recently completed, increasing production capacity from 1 to 2.5 million barrels of cement per year. Distribution facilities in the other islands of Hawaii are also being enlarged and improved.

The Hawaiian Cement Corporation is not considered a material asset of the Company or a foreseeable material contributor to the total revenues of the Company.

#### **Electrical Products Group**

The wholly-owned electrical products group, composed of three operating divisions, develops, manufactures and markets products used in the electrical industry.

##### *Rome Cable Division*

The Rome Cable Division, its headquarters, research and manufacturing facilities located in Rome, New York, produces a broad range of bare and insulated electrical conductors. Using both copper and aluminum, Rome produces building wire for the construction industry; power transmission and underground distribution cable for electric utility systems; power cable for the mining industry; and a variety of simple and complex control cables and specialty wire and cable for industrial, electrical and electronic products manufacturers.

The Rome Cable Division's products are marketed throughout the United States and Puerto Rico by its own sales, warehousing and service organization, supplemented by distributors and manufacturers' representatives.

##### *Torrance Tubing Division*

The Torrance Tubing Division has its manufacturing facilities in Torrance, California and at a new plant in Houston, Texas completed in 1971. It is a leading producer of steel electrical conduit and mechanical steel tubing. Electrical conduit, which accounts for 90% of the Division's sales, is used to house, support, and protect electrical conductors in buildings, and underground for lighting systems and power distribution. Mechanical steel tubing is used in the manufacture of medical equipment, furniture and other industrial and consumer products.

Conduit sales are made through manufacturers' representatives to electrical wholesalers and distributors. Mechanical steel tubing is sold direct to original equipment manufacturers.

##### *T. J. Cope Division*

The T. J. Cope Division, located in Collegeville, Pennsylvania, manufactures modular pre-fabricated troughs and raceways which can be assembled in a wide variety of configurations to support electrical

cable in industrial and power plants. It markets its products in the United States through a network of independent agents and electrical distributors.

A new line of equipment for pulling electrical cable through conduit was added to T. J. Cope's products in 1971. A licensee has been appointed in Canada to manufacture and market cable support equipment there.

## **Iron Ore**

Iron ore is produced by two of the Company's affiliates, Marcona Corporation and the Mount Goldsworthy group.

### *Marcona Corporation*

Marcona Corporation (herein called "Marcona") is a New York corporation, whose voting stock ("Class A") is held 50 per cent by the Company and 50 per cent by Utah International Inc. The principal equity stock ("Class B") is 46 per cent-owned by each of these two companies, the balance being owned by another corporation. The information pertaining to Marcona has been provided by Marcona Management. The Company has been unable to independently verify such information.

One of Marcona's subsidiaries, *Marcona Mining Company* (herein called "Mining"), operates extensive iron ore mining and beneficiation facilities at San Nicolas, Peru. In 1972 this operation shipped 9.0 million long tons of ore products, including sinter feed, pellet feed, pellets and slurried pellet feed. Approximately 78 per cent of the total production was shipped to the Japanese steel industry, the remainder to customers in Europe, the United States and South America.

By agreement with Corporacion Peruana del Santa ("Santa"), an instrumentality of the government of Peru, Mining has the right to occupy a concession area controlled by Santa, to construct mining and other facilities thereon, and to extract, process and export iron ore. Originally executed in 1952, the concession agreement with Santa has been periodically amended, most recently in 1966, and expires on November 4, 1982. In addition to provisions for the payment of royalties on a formula basis, Mining is required to maintain *in situ* a national reserve of 70 million tons of proven iron ore (of a minimum of 40% iron content and with other characteristics making such ore suitable for treatment in the San Nicolas Beneficiation Installations), and to sell natural ore and beneficiated ore products required for steel production to a government-owned steel mill in Peru at preferential prices. By decree law announced on February 14, 1973, Mineroperu, another agency of the Government of Peru, is to acquire the assets and assume the liabilities, rights and obligations relating to the mining activities of Santa effective February 28, 1973.

Mining also has the right to produce iron ore from its La Justa deposit, located in a concession area held directly by it, as the source of part of its production.

The Santa concession facilities include mines, a mine plant, and a town site at San Juan, all of which revert to Santa upon expiration of the concession agreement. Separate concessions cover the facilities held directly by Mining, including (a) the La Justa iron ore deposit and (b) the San Nicolas Beneficiation Installation which include a mine plant, a cross-country conveyor system and the principal beneficiation facilities.

Santa has the option (exercisable by November 5, 1980) to participate jointly with Mining, after November 4, 1982, in ore beneficiation operations and sales. In the event such option is not exercised, Mining could continue, after November 4, 1982, to operate for its own account the San Nicolas Beneficiation Installations utilizing ore from the La Justa deposit or other acquired ore.

Mining's proven reserves of open-pit ore, at December 31, 1972, as estimated by its staff engineers, were approximately 317 million long tons at the Santa concession and 32 million long tons at the La Justa deposit. Such reserves average 56% Fe content. Cyprus has not been able to independently verify such reserves.

Mine operations over the past five years are summarized as follows:

	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>
<b>Ore Mined</b> — dry long tons (2,240 lbs.)					
Tons (000).....	11,743	11,774	12,386	11,421	13,210
Grade Fe.....	53%-58%	53% to 55%			
<b>Tons of Products Produced</b> —					
Natural long tons (2,240 lbs.)					
Direct sinter ore (000).....	1,055	676	617	934	253
Gravity concentrate (000).....	1,398	2,018	2,249	2,102	2,059
Magnetic concentrate (000).....	3,197	3,192	3,380	2,774	3,278
Slurry (000).....	6	60	38	19	470
Filter cake (000).....	—	—	—	—	98
Pellets (000).....	<u>3,307</u>	<u>3,522</u>	<u>3,639</u>	<u>3,186</u>	<u>3,476</u>
Total production (000).....	<u>8,963</u>	<u>9,468</u>	<u>9,923</u>	<u>9,015</u>	<u>9,634</u>
<b>Shipments</b> — Natural long tons (2,240 lbs.)					
Direct sinter ore (000).....	901	742	783	796	336
Gravity concentrate (000).....	1,478	2,054	2,038	2,407	1,752
Magnetic concentrate (000).....	3,185	3,150	3,404	2,862	3,074
Slurry (000).....	6	12	38	19	299
Filter cake (000).....	—	—	—	—	71
Pellets (000).....	<u>3,279</u>	<u>3,484</u>	<u>3,749</u>	<u>3,059</u>	<u>3,532</u>
Total shipments (000).....	<u>8,849</u>	<u>9,442</u>	<u>10,012</u>	<u>9,143</u>	<u>9,064</u>

Cia San Juan, S.A. (herein called "San Juan"), a wholly-owned Panamanian subsidiary of Marcona as agent for Mining, markets Mining's entire production of iron ore except that sold in Peru and Argentina. It sells such ore at a price that includes ocean transportation costs ("C & F"), and arranges transportation of the ore from Peru to the place of delivery.

San Juan's ore sales are all in U.S. dollars and all Peruvian source ore is sold on a delivered basis. Ore sales are made entirely by San Juan personnel, with local representation retained for customer contact, and shipping schedule administration. About 70% of San Juan's available ore is sold on long-term contracts (three to ten years), and the balance on shorter term or spot sales.

In 1972 a \$28 million expansion program was completed at the Mining property. The project substantially upgraded the product mix through expanded facilities for fine grinding, magnetic separation and flotation. Port and harbor facilities at San Nicolas were also expanded and the Company's pellet plant capacity was increased to approximately four million long tons per year. Mining and the Government of Peru are engaged in negotiations which contemplate that an agency of the Government of Peru will purchase a 25% interest in Mining's Peruvian assets for a fair value.

Following this transaction, if consummated, the Peruvian mining operations would be conducted by the parties as a Special Mining Enterprise owned 75% by Mining which would also manage the operation.

Late in 1972, five Japanese steelmakers agreed to pay the equivalent of more than \$360 million over seven years to buy more than 22 million metric tons of iron ore pellets from Mining. In addition, these Japanese firms agreed to lend Mining \$66 million to provide equipment and construction of a third iron ore pelletizing plant in Peru which will have an annual production capacity of 3.5 million long tons. Mining is presently seeking the required Peruvian Government approval of the building of the pelletizing plant and its financing. There is no assurance that such approval will be forthcoming.

In 1970 Marcona, through its wholly-owned subsidiary, *Marcona (N.Z.) Company* (herein called "Marcona-N.Z."), initiated a project to produce iron sand concentrates from extensive iron sands deposits on the west coast of New Zealand. Marcona-N.Z. has a 75% interest in the project, the remaining 25% being held by a New Zealand firm. Operations began in June 1971, and consist of hydraulic dredging followed by magnetic and gravity separation of the iron-bearing material. At the time of shipment, the concentrates are pumped offshore in slurry form to specially equipped vessels. Marcona-N.Z. and its New Zealand associate have contracted to ship 11 million long tons of concentrate over a ten-year period to a group of seven Japanese steel firms. The total investment of Marcona-N.Z. in the project is approximately \$9.6 million.

Reserves in the area being mined, as estimated by Marcona-N.Z.'s engineers, are approximately 302 million long tons of crude iron sands averaging approximately 10% recoverable iron content. Such reserves are estimated to yield approximately 50 million long tons of concentrate at 56% Fe content. Cyprus has made no independent verification of such reserves.

#### *Mount Goldsworthy Mining Associates*

The Company is an equal participant in Mount Goldsworthy Mining Associates ("Mount Goldsworthy"), a Western Australia iron ore mining project, together with Utah Development (an affiliate of Utah International Inc.) and Consolidated Gold Fields Australia Limited.

The Company and each of the other participants has a one-third undivided interest in a mining lease and plant facilities situated in north Western Australia. The term of the lease is 21 years from 1965 and is renewable for an additional term of 21 years.

In 1972 Mount Goldsworthy shipped a total of 6,464,525 long tons (2,240 pounds) of iron ore to Japan, including 2,522,746 long tons of iron ore fines.

Mine operations over the past five years are summarized as follows:

	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>
Tons of ore mined and crushed.....	<u>4,497,000</u>	<u>5,315,000</u>	<u>6,275,000</u>	<u>6,506,000</u>	<u>5,390,000</u>
Lump Ore					
DLT*.....	3,739,136	3,520,941	4,250,487	3,989,826	3,767,088
% Fe.....	65.44	64.97	64.68	64.51	64.43
Fines					
DLT.....	653,083	1,288,755	2,029,627	2,584,182	2,387,046
% Fe.....	<u>62.78</u>	<u>62.81</u>	<u>62.77</u>	<u>62.66</u>	<u>62.98</u>
Total Shipments					
DLT.....	4,392,219	4,809,696	6,280,114	6,574,008	6,154,134
% Fe.....	<u>65.04</u>	<u>64.39</u>	<u>64.06</u>	<u>63.78</u>	<u>63.87</u>

\* Dry Long Tons

Construction designed to expand the Mount Goldsworthy operation to an annual production rate of eight million long tons progressed to its final stages during 1972. Ore reserves as of December 31, 1972 were approximately 114 million long tons averaging 62.6% iron and 0.05% phosphorus of which 56 million long tons have been sold to Japanese steel companies under long-term contracts.

Additional sales on a "spot" basis are made from time to time as scheduling and inventory conditions permit.

Exploration work in an area known as Mining Area "C" has resulted in the discovery of approximately 400 million long tons of iron bearing material containing about 63 per cent iron with an acceptable phosphorus content. This iron ore discovery is located about 210 miles south of Port Hedland, the port through which Goldsworthy ore is now shipped. It is in an area covered by the original agreement between the state of Western Australia and the joint venturers. Development of Mining Area "C" would be a major project requiring sales probably in excess of 10 million long tons per year to justify a \$300 million investment. Additional tonnage has been indicated by wider-spaced drilling. Further drilling will be necessary to determine whether such material should be added to Mining Area "C", and feasibility studies will be necessary to determine to what degree Mining Area "C" may be commercially mineable.

### **Shipping Operations**

San Juan and Marcona Carriers, Ltd. (together herein called "Carriers"), wholly-owned subsidiaries of Marcona, are engaged in ocean transport of ore, oil and other bulk commodities. Through Marcona Cyprus has a 46% equity interest in this business. Carriers operates one of the largest dry cargo fleets afloat. The fleet consists of 10 owned vessels, totaling more than 925,000 deadweight tons, plus a group of chartered ships aggregating at the year end approximately 1.4 million deadweight tons. Nine of the 10 owned vessels are capable of transporting oil in addition to iron ore and other dry cargoes.

In 1972, Carriers' fleet transported a total of 16.4 million tons of cargo approximately 127.5 billion ton-miles, compared with 1971 totals of 18.3 million tons and 135 billion ton-miles.

Carriers utilizes Marcona's patented slurry handling system, "Marconaflo", which involves the pumping of ore and other bulk materials in liquid suspension, or slurry, form; subsequent removal of the liquid prior to transport in specially designed ocean carriers, rail cars or other vessels; and repulping of the material at destination for pipeline delivery to the receiver.

A major application of the Marconaflo system was begun in November 1972 when the M.S. *San Juan Exporter* discharged 80,000 dry long tons of iron ore slurry via dockside pipeline to the Hirohata Works of Nippon Steel Corporation, Japan's largest steel producer. This was the first shipment under a 10-year, \$113 million contract calling for annual delivery of 1,000,000 tons of ore in slurry form.

A new major land-based application of the Marconaflo system also became operational in 1972 at the Atlas Consolidated Mining Company's copper mining facility in Cebu, in the Philippines. There Marconaflo is being employed in a tailings removal and storage operation involving the transportation of approximately 1,250,000 tons of material annually.

### **Mineral Exploration**

The search for new mineral resources is a continuous enterprise of the Company. The Company and its subsidiaries and affiliated companies are currently extracting approximately 39 million tons of ore annually at various operations throughout the world. The Company conducts a concentrated year-round mineral exploration activity having as its goal the replenishment and expansion of the Company's ore reserves. The exploration expenses have averaged \$4,135,000 annually over the last three years.

Mineral exploration targets in 1972 comprised copper, molybdenum, lead, zinc, gold, silver, nickel, coking and steam coal, tin, fluorspar and iron ore. During the year approximately 40 separate mineral prospects were subjected to detailed investigation, and actual drilling was undertaken on 25 of these.

### **Corporate Research Activities**

The Company is conducting research activity with respect to a patented new electro-chemical process designed to permit the production of copper with no accompanying air or water pollution. This research is being conducted through Cyprus Metallurgical Processes Corporation (Cymet), owned 90% by Cyprus, 5% by Hazen Research, Inc. and 5% by the inventor of the process. The pilot plant being built in Arizona to determine the commercial feasibility of this process is scheduled to be on-stream by late-1973. The Cymet process, which leaves only a small amount of inert solid waste, does not pollute the environment. It is expected to be competitive with costs of conventional pyrometallurgical processes. The laboratory results suggest that the process may be applicable to many sulfide ores, including lead, zinc, silver and other concentrates in addition to copper. The cost to the Company for 1970 was approximately \$315,000, for 1971 it was approximately \$350,000 and for 1972 it was approximately \$1,419,000.

The cost of research and development for the Company's present operating groups is not material.

### **Employee Relations**

As of December 31, 1972 the Company and its wholly owned subsidiaries regularly employed approximately 3,000 persons. Of these, approximately 2,000 are covered by labor agreements. One such labor agreement, covering 55 employees, is in the process of being renegotiated. The remaining agreements expire on various dates between June, 1973 and July, 1975.

Pima Mining Company has approximately 966 employees on its payroll. Approximately 769 production and maintenance employees are represented for purposes of collective bargaining by a group of five labor unions. Pima has a contract with these unions which will run until August 31, 1974.

Marcona Corporation has approximately 3,270 employees in Peru, all but 48 of whom are Peruvian. Most Peruvian employees are represented by labor unions.

Anvil Mining Corporation employs approximately 392 persons, of which approximately 282 are represented by a labor union under a contract which will run until September 30, 1975.

The Mount Goldsworthy project employs approximately 808 persons. Under Australian government regulations wage rates and other conditions of employment are regulated by a government arbitration board which, in the case of Mount Goldsworthy, has handed down an award which will be in effect until December 31, 1973.

There are eleven employees engaged in research and development in the electrical products division. Company-wide there are thirty-one such employees so engaged.

### **Environmental Matters**

Stringent ambient air and emission standards for several common pollutants have been set or are being proposed by the Federal Environment Protection Agency pursuant to the National Clean Air Act as well as by State agencies. Over the past five years, the Company has expended from \$100,000 to \$400,000 each year on air pollution control matters, which to date has had no material effect on either the Company's operations or the Company's annual gross profits. The ultimate effect of these standards will depend upon their nature. Although the Company cannot estimate the amount of expenditures which will be required in future years, such expenditures are expected to increase.

### **Effect of Devaluation of U. S. Dollar**

In the foreign operations of the Company, devaluation of the U. S. Dollar has the effect of increasing costs that are paid in local currencies. When this occurs in the Company's iron ore

operations in Australia and New Zealand, the effect can be substantial because iron ore sales are characteristically made under contracts specifying fixed U. S. Dollar prices. There is no effect on the operations in Peru because the Government of Peru devalued the Peruvian currency in exactly the same ratio as the United States dollar devaluation. In the case of the Company's Canadian lead and zinc operations, it appears that increases in the U. S. Dollar equivalent of world prices for these commodities more than offset the increased cost incurred in Canadian dollars. In world-wide shipping, it appears that increases in chartering rates more than offset the additional costs that are incurred in currencies other than U. S. Dollars.

### **Foreign Exchange Regulations**

In each of the foreign countries in which the Company operates, it has obtained from the appropriate governmental agency an authorization to export its funds. In all of the years of its operations, it has never had any difficulty, to date, in exporting its funds. There can be no assurance that such approvals will continue to remain in effect.

### **Tariffs**

At none of the Company's foreign operations is any product shipped into the United States and therefore the Company has not had any import tariff or duty problems.

### **Wage-Price Matters**

The Company cannot accurately predict the overall effect of President Nixon's economic program on its business in view of the many uncertainties with respect to the program, including its duration and implementation. However, the President's program in its present form has not had, and the Company does not expect that it will have, a material adverse effect on its business.

### **Litigation**

There is pending in the Arizona Superior Court for Pima County a suit filed on November 25, 1969, by Farmers Investment Company, an Arizona corporation, requesting that Pima Mining Company and several other major mining companies be enjoined from obtaining and using water for mining operations under circumstances that are alleged to be injurious to the plaintiff. Monetary damages now have been requested by the plaintiff in the sum of \$70,000,000 and the plaintiff has requested an accounting from Pima as to the profits and gains realized from the allegedly wrongful taking of water by Pima. It is the opinion of Musick, Peeler & Garrett, Los Angeles, California, counsel for Pima, that Pima will not be deprived of the water necessary to operate its mine and that any monetary recovery against Pima will not be material in amount.

A "30-day letter" was issued on October 23, 1972 by the United States Internal Revenue Service against Pima Mining Company with respect to the years 1964 through 1968 in the amount of \$3,344,675. Pima has responded with a written protest and is in the process of appealing the proposed assessment to higher levels within the Internal Revenue Service.

The Supreme Court of Peru has affirmed a 1971 decision of an Appellate Court to the effect that a subsidiary of Marcona Corporation on a mining concession assigned from an instrumentality of the Government of Peru did not qualify for depletion deductions in computing income taxable in Peru. Based upon this decision, additional taxes and penalties have been assessed for the years 1957-1969 aggregating approximately \$17.9 million after crediting approximately \$2 million for tax overpayments in prior years. The subsidiary has arranged with the Peruvian Banco de la Nacion for payment of the additional assessment in monthly installments over a period of ten years. Peruvian counsel has advised Marcona Corporation that under the provisions of the concession agreement the Peruvian Government instrumentality is obligated to indemnify the Marcona subsidiary against loss for the additional assessment. Based upon this advice Marcona considers that no loss will be sustained as a result of the additional assessment. Accordingly, no liability for this item has been recorded in Marcona's financial statements.

The Internal Revenue Service has issued a report which includes assessments against Marcona totalling approximately \$2,700,000 for the years 1963 through 1967. It is the opinion of Pillsbury, Madison & Sutro, San Francisco, California, counsel for Marcona, that it has meritorious defenses against the major portion of these assessments.

Cyprus Mines Corporation has responded to two subpoenas *duces tecum* issued May 4, 1972 and June 29, 1972 at the request of the Antitrust Division of the United States Department of Justice, by the Grand Jury for the United States District Court for the Eastern District of New York which is conducting an industry-wide investigation of the copper industry. While it is not possible to predict what, if any, action may be taken by the Grand Jury with respect to its investigation, it is the opinion of Musick, Peeler & Garrett, Los Angeles, California, counsel for Cyprus that the materials submitted to the Grand Jury by Cyprus do not reflect any violations of the antitrust laws or any other federal statute.

## BUSINESS AND PROPERTIES OF BAGDAD

### General

Bagdad, reincorporated under Arizona law in 1967, began operations as a Delaware corporation in 1927. It is primarily engaged in mining and processing basic metals, principally copper, at its mine at Bagdad, Arizona, approximately 120 miles northwest of Phoenix. Through wholly owned subsidiaries headquartered in Phoenix (all included in references made to "Bagdad" in this section), it also produces various manufactured products made of fabricated steel or plastic. These two lines of business have made the following relative contributions to Bagdad's total operations over the past five years:

	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>
Total sales(1)(2)					
Basic metals.....	75%	72%	74%	69%	69%
Manufactured products.....	25	28	26	31	31
Income before income taxes(1)(3)					
Basic metals.....	97	95	94	94	90
Manufactured products.....	3	5	6	6	10

- (1) The percentages shown have been calculated before elimination of inter-company transactions.
- (2) Excluding from total sales interest and similar types of other income.
- (3) Including, as income from basic metals, interest and similar types of other income and the expense related thereto.

### Basic Metals

In its open pit mining operations Bagdad strips a barren surface layer of overburden and an intervening zone of copper oxide material to get at the basic ore, copper sulphide. Materials are mined from the pit at a rate required to feed Bagdad's milling facilities, operating at full capacity on a continuous basis, with approximately 5,600 tons of sulphide ore per day. Concentrate produced by the mill, with a copper content of approximately 30% and a small silver content, is now being sold by Bagdad to others for further treatment. Bagdad's milling process also results in its recovery of a molybdenum sulphide by-product.

Copper oxide material extracted from the mine is dumped separately from the overburden in anticipation of the possibility of subsequent leaching. In 1961 Bagdad began leaching its copper oxide dumps with dilute sulphuric acid to obtain a solution which, until mid-1970, was run through a precipitation process to produce a copper precipitate. That process was replaced in August 1970 by solvent extraction and electrowinning processes which result in cathode copper.



Mine operations over the past five years are summarized as follows:

	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>
Sulphide ore milled (tons).....	2,099,223	2,030,112	2,028,265	2,009,974	1,982,368
Average grade (per cent).....	0.65	0.66	0.75	0.81	0.70
Concentrate milled from sulphide ore (pounds of copper contained*).....	22,218,258	20,467,794	22,111,515	25,039,418	24,558,652
Copper leached from oxide ore (pounds of copper contained).....	14,258,460	14,780,613	12,440,358	14,680,540	13,390,668
Molybdenum sulphide (pounds of molybdenum contained).....	608,820	449,671	401,813	450,039	455,380
Silver (in ounces).....	63,242	64,710	64,302	54,612	67,075

\* Representing a recovery over the five-year period of approximately 79% of copper in the ore milled.

Continuation of Bagdad's mining operations on the foregoing basis would be from a reserve of sulphide ore which at February 1, 1973 amounted to approximately 38,000,000 tons with a copper content of 0.66%, overlain by approximately 12,500,000 tons of copper oxide material and overburden. Bagdad has now concluded that a significant expansion of its operations relative to sulphide ore would make economically feasible the mining of an additional 265,000,000 tons of sulphide material with a copper content of 0.47%, the extraction of which would require the stripping of approximately 313,300,000 tons of oxide material and overburden. Such additional copper sulphide tonnage, combined with the 38,000,000-ton reserve currently being mined, results in a reserve totaling 303,000,000 tons with a copper content averaging 0.49% and a minor amount of molybdenum and silver. Such average copper content is significantly lower than the ore grades mined by Bagdad over the past five years (as set out in the foregoing table), and the profitability of future operations will greatly depend upon such efficiencies, if any, as may result from a larger scale of mining and milling operations.

Bagdad has been stripping the present reserve in advance of current needs and charging the attendant costs to current expense; stripping ratios in the proposed expanded operation are not in general expected to be more disadvantageous in terms of their proportionate effect upon mining costs. The copper oxide materials which overlay the 303,000,000 tons of sulphide reserves are estimated at 40,000,000 tons with an acid-soluble copper content of approximately 0.36%. From prior extractive operations, Bagdad has stockpiled approximately 77,000,000 tons of oxide material with an acid-soluble copper content remaining (after leaching up to January 1, 1973) roughly estimated at 0.21%. While cathode copper produced by Bagdad from oxide material has a relatively lower assigned cost than copper concentrate derived from sulphide ore, results from leaching oxide material vary considerably with certain physical conditions and the duration of the leaching process, and no attempt has been made to determine the recoverable content of oxide material which remains in place or in existing stockpiles. In any event, Bagdad does not propose that any expansion of its copper oxide operation will accompany the contemplated expansion of production from sulphide ore.

The expanded ore reserves would be mined by extensions of the existing open pit within areas covered by patented or unpatented mining claims held by Bagdad free from royalty obligations. It also holds mining claims and State leases covering adjacent land believed by it to include the practical limits of its ore body and to contain certain amounts of additional copper-bearing material, the commerciability of which remains to be determined by further exploration and testing.

The principal features of the proposed expansion consist of a new mill (presently planned to increase Bagdad's milling capacity from 5,600 to approximately 30,000 or more tons per day) and access to adequate facilities for the treatment of copper concentrate produced by the new mill. Bagdad is not aware of existing treatment facilities with excess capability which could feasibly handle its

expanded production of sulphide concentrate, and has therefore suggested to Cyprus the development of new facilities. Under one expansion plan considered by Bagdad, it estimates that a very large capital investment (in the order of \$100,000,000) would be required to build the new mill, to create treatment facilities at the mine site and to provide additional mining and other equipment necessary to conduct the expanded operation. As set forth in "Recommendation of Merger", page 2, the magnitude to Bagdad of such an investment is the principal motivation for its entrance into the merger period. Bagdad is informed by Cyprus that it contemplates funding the investment by bank loans repayable in installments over about six years.

Bagdad believes that it now controls or can obtain use of the additional acreage necessary to support the planned expansion with plant, dump and related sites. However, the expansion would also require one or more dependable sources of large quantities of additional water for the milling and treatment processes and of diesel fuel for the mining operation, and these sources are not presently assured. Implementation of the expansion plan would also require compliance with pollution control laws and regulations applicable to any new or expanded facilities. Bagdad believes that the adoption of such laws and present uncertainties concerning such regulations have impeded the construction of treatment facilities by others, and accordingly has no assurance that it or Cyprus could build or finance acceptable facilities of their own or arrange on a long-term basis for alternative means of treating concentrate produced in an expanded operation. If, as a consequence of these or other considerations, Bagdad or Cyprus would be unable to carry out a successful expansion plan, it is doubtful that the additional sulphide tonnages referred to above could be exploited on an economic basis.

Bagdad's expansion plan would not affect its production of cathode copper from oxide ore or its production in a refinery at the mine site of copper powder which it sells to manufacturers of certain friction and molded products. Feed for the powder refinery consisted of copper precipitate produced by Bagdad from oxide material until mid-1970, when cathode replaced precipitate as the end product of the copper oxide processes. Since then, Bagdad has relied upon outside sources of precipitate copper and has occasionally encountered short supplies of the quality required by it. The refinery produced 3,249,532 pounds of copper powder in 1968, 6,327,803 pounds in 1969, 7,132,771 pounds in 1970, 5,157,450 pounds in 1971 and 4,337,797 pounds in 1972.

Bagdad's copper concentrate production is currently being sold under short-term arrangements to American Smelting and Refining Company at its smelter in eastern Arizona, and to Copper Range Company at a smelter in Michigan, at prevailing domestic prices less smelter charges and other adjustments. Because Bagdad bears the cost of freight to both smelters, sales to the Michigan smelter (which first became of significance in 1972 and accounted for 13% of that year's sales) are relatively less profitable per pound of concentrate shipped; the extent to which the Michigan or other long-distance shipments will continue or increase is related to operational problems at the Arizona smelter arising, among other things, out of pollution control regulations in Arizona. Substantially all of Bagdad's cathode is sold by it directly to copper fabricators. It sells its copper powder to a limited number of users, but believes that other buyers could be developed if the need arose and if its supply of acceptable precipitate copper were to remain adequate for continued powder production. Except for periods when labor strikes at the smelter outlets have impeded sales of its copper concentrate (as occurred in 1971, with ramifications discussed on page 16 following its Consolidated Statement of Income), Bagdad has not encountered significant difficulty in selling any of its concentrate or cathode copper or the necessity for carrying excessive inventories of such products, although some difficulty and attendant accumulation of inventory has from time to time been experienced with powder copper. However, Bagdad has no long-term sales contracts for the sale of any of its copper products and therefore no assurance of the continued marketability of such products.

### **Manufactured Products**

In its steel fabrication operations, Bagdad purchases steel directly from mills in a variety of commercial forms for fabrication into several products. Such products include large storage tanks, corrugated steel culvert and agricultural and automotive car wash equipment. Two lines of agricultural equipment are produced and sold by Bagdad under a patent licensing agreement containing a minimum sales requirement which Bagdad has failed to meet; however, it does not presently expect that the patent holder will exercise his right to terminate the agreement as a consequence of such failure, and its revenues over the past five years from sales of these equipment lines have not been significant.

Bagdad's plastic products consist of plastic valves and expanded polystyrene foam used mainly for packaging purposes.

Manufactured steel products of a proprietary nature and the plastic products are sold primarily through independent dealers and distributors and, to a lesser extent, by Bagdad's own sales personnel and through manufacturers' representatives. Other steel product sales are made on the basis of competitive bids. Bagdad's manufacturing operations have not to date been required to make any significant expenditures for pollution control measures.

### **Employees**

At February 1, 1973 Bagdad had approximately 837 employees, none of whom were organized for bargaining purposes with the exception of 22 persons engaged in field erection of fabricated steel. Bagdad considers its labor relations to have been excellent.

Approximately 517 of the employees work at the mine and, together with their families and other residents, compose a community of about 2,000 people at Bagdad, Arizona. Their houses and some of the commercial enterprises in the town are owned by Bagdad, which also provides certain utility, hospitalization and other services to the residents.

### **Regulatory and Other Considerations**

Environmental considerations are expected by Bagdad to be of increasing importance to its mining operations. As previously indicated, the ability of Bagdad or Cyprus to maintain compliance with pollution control laws and regulations will be critical to implementation of the mine expansion program. These laws and regulations, both State and Federal, as well as others relating to the impact of mining, milling and smelting operations upon the environment, are expected to become increasingly stringent. They may adversely affect the efficiency of such operations and in some instances require their curtailment, and they will require significant capital expenditures for protection of the environment. As long as Bagdad is in any way dependent upon others in the mining industry (as, for example, the eastern Arizona and Michigan smelter operators to which it sells its copper concentrate) it is subject to attendant inefficiencies and curtailments in their operations, as well as its own. A significant component of the price adjustments made by the Arizona smelter for concentrate sold to it by Bagdad is an assessment for amortization of pollution control equipment required at the smelter. That assessment, together with other pollution control measures taken by Bagdad to comply with existing laws and regulations, have since 1970 required capital expenditures and increased operating expenses in aggregate amounts estimated to range between \$175,000 and \$300,000 per year through 1972; while expecting costs of a similar nature to increase in the future, Bagdad is not able to predict the amounts which will be involved.

Safety aspects of Bagdad's mining operations are closely regulated by the U.S. Bureau of Mines, the Occupational Safety and Health Review Commission and the State Mine Inspector of Arizona. Certain of the utility and commercial services rendered by Bagdad in the town at the mine also involve health inspections and similar controls.

Any appreciable energy shortage at the mine would severely curtail its operation. Diesel fuel for the extractive operations presently appears to be in particularly critical supply. The remote location

of the mine and adjoining townsite increase their dependency upon established energy sources, as well as upon existing means of transportation. Mine products are shipped for varying distances by trucks owned by others; for rail transport, Bagdad depends upon a single carrier with loading facilities 23 miles from the mine. Bagdad's operations would be adversely affected during any prolonged transportation stoppage resulting from a labor dispute or other cause.

Bagdad is among the respondents to the Grand Jury subpoenas referred to under "Business and Properties of Cyprus — Litigation" page 30). Messrs. Snell & Wilmer, Phoenix, Arizona, Bagdad's general counsel, are of the opinion that the materials submitted by Bagdad to the Grand Jury do not reflect any violations of the antitrust laws or any other federal statute, although such counsel are not able to predict what action, if any, may be taken by the Grand Jury with respect to its investigation. See Note 7 of Notes to Consolidated Financial Statements of Bagdad for an assessment of additional federal income taxes against Bagdad and its protest thereof.

### **VOTING RIGHTS WITH RESPECT TO ELECTION OF CYPRUS DIRECTORS**

In electing directors each Cyprus stockholder is entitled to one vote for each share held for each office to be filled. Votes may not be cumulated. Since the shares of Cyprus Common Stock do not have cumulative voting rights, holders of more than 50% of the outstanding shares can elect all of the directors, and the holders of the remaining shares cannot elect any directors.

### **NOMINATION AND ELECTION OF CYPRUS DIRECTORS**

At the Annual Meeting of Cyprus, fourteen directors will be elected in accordance with the By-Laws of Cyprus to serve for the ensuing year and until the election of their successors.

The following table sets forth the names of the nominees for election to the Cyprus Board of Directors, the principal occupation of each, the period during which each has served as a director of Cyprus, and the number of shares of Common Stock beneficially owned, directly or indirectly, by each as of February 13, 1973. All of the nominees named below are presently members of the Board of Directors of Cyprus, and all, except Paul W. Allen and Donlin P. Murdy, were elected to their present terms of office by a vote of the shareholders of Cyprus at a meeting for which proxies were solicited. Both Mr. Allen and Mr. Murdy have been full time executive officers of Cyprus throughout the past five years.

<u>Nominee</u>	<u>Principal Occupation</u>	<u>Director Since</u>	<u>Number of Shares of Common Stock Beneficially Owned February 13, 1973(1)</u>
Paul W. Allen	Executive Vice President of the Corporation	1972	8,044(2)
Luther C. Anderson	President, Sutter Basin Corporation Limited (real estate investments)	1965	1,210
J. Leland Atwood	Senior Consultant, North American Rockwell Corporation (aerospace, automotive, electronics and industrial products)	1971	200
Asa V. Call	Honorary Chairman, Pacific Mutual Life Insurance Company	1959	3,000

<u>Nominee</u>	<u>Principal Occupation</u>	<u>Director Since</u>	<u>Number of Shares of Common Stock Beneficially Owned February 13, 1973(1)</u>
Gerald G. Kelly	Secretary and General Counsel of the Corporation; Partner, Musick, Peeler & Garrett — Attorneys	1968	1,000
Frank L. King	Chairman of the Board, United California Bank	1963	900
Kenneth Lieber	President of the Corporation	1959	10,000
Henry T. Mudd	Chairman of the Board and Chief Executive Officer of the Corporation	1945	378,718(3)(6)
Seeley W. Mudd, II, M.D.	Physician and Surgeon	1968	288,000(4)
Donlin P. Murdy	Executive Vice President of the Corporation	1972	33,768(7)
H. Safford Nye	Consultant	1956	1,000
Norman F. Sprague, Jr., M.D.	Personal Investments	1959	13,560(5)(6)
Charles B. Thornton	Chairman of the Board and Chief Executive Officer of Litton Industries, Inc. (defense and space systems, industrial equipment and professional products and services)	1963	4,600
Maynard J. Toll	Partner, O'Melveny & Myers — Attorneys	1965	400

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- (1) Based on information furnished by the persons named.
- (2) Not included in these holdings are 2,400 shares (.03%) held in trusts of which Mr. Allen is a trustee but in which he has no beneficial interest.
- (3) Not included in these holdings are 66,765 shares (.76%) held in trusts of which Mr. Mudd is a trustee but in which he has no beneficial interest.
- (4) Not included in these holdings are 342,310 shares (3.90%) held in trusts of which Dr. Mudd is a co-trustee but in which he has no beneficial interest.
- (5) Dr. Sprague also serves as trustee of certain trusts and of a charitable foundation which hold in the aggregate 157,522 shares (1.79%). He has no beneficial interest in any of these entities. Mrs. Sprague holds directly an additional 266,168 shares (3.03%).
- (6) Mr. Mudd and Dr. Sprague are co-trustees of Harvey Mudd College, Mildred E. and Harvey S. Mudd Foundation and various other trusts. The assets of these trusts include 1,308,521 shares (14.90%) but neither Mr. Mudd nor Dr. Sprague has any beneficial interest in the assets of these trusts.
- (7) Included in these holdings are 15,850 shares (.18%) held in an estate of which Mr. Murdy is executor. These shares are in a trust in which Mr. Murdy's sole beneficial interest is a life income from said trust. Mrs. Murdy holds an additional 600 shares (.007%).

# **REMUNERATION OF DIRECTORS AND OFFICERS OF CYPRUS MINES CORPORATION**

## **Direct Remuneration**

The following table shows the aggregate direct remuneration paid or set aside by the Corporation for services rendered in all capacities during the fiscal year ended December 31, 1972, to or for the benefit of (i) each Director whose aggregate remuneration for such fiscal year exceeded \$30,000, and each of the three highest paid officers of the Corporation during such fiscal year and (ii) all Directors and officers of the Corporation as a group, and the estimated annual retirement benefits proposed to be paid to the persons named:

<u>Name</u>	<u>Capacity in Which Remuneration Was Received</u>	<u>Aggregate Direct Remuneration</u>	<u>Awards Made in 1972 Under Incentive Compensation Plan</u>	<u>Corporate Contributions in 1972 to the Savings Plan for Salaried Employees</u>	<u>Estimated Annual Retirement Plan Benefits at Age 65 if Employed Until Then</u>
		(1)	(2)	(3)	(4)
Henry T. Mudd	Chairman of the Board and Chief Executive Officer	\$150,000	\$ 57,700	\$ 960	\$ 72,520
Kenneth Lieber	President and Director	89,000	26,450	—	28,988
Donlin P. Murdy	Executive Vice President of the Corporation	72,000	26,450	960	14,000
Paul W. Allen	Executive Vice President of the Corporation	68,000	24,050	960	20,355
All Directors and Officers as a group, including the persons named above (25 individuals)		807,185	230,985	9,678	276,491

- (1) Aggregate direct remuneration includes base salaries, cash bonuses, and directors' fees. Aggregate direct remuneration does not include the \$37,241 portion of Musick, Peeler & Garrett legal fees received by Director, Secretary and General Counsel, Gerald G. Kelly, a member of that firm.
- (2) Incentive Compensation Plan: Under the terms of the 1965 Incentive Compensation Plan key executives designated by the Compensation Committee of the Board of Directors may receive awards for their performance in the previous fiscal year if the after-tax return on shareholders' equity exceeded seven percent (7%) in that fiscal year. Participants are assigned target incentive ratios ranging from 25% to 50% which are applied to each participant's base compensation to determine the target awards which may be earned if the Corporation realizes a 15% return after taxes on shareholders' equity. Under the terms of the Plan the fund from which each year's awards are made by the Compensation Committee may not exceed  $\frac{1}{25}$  of the Corporation's earnings in excess of an amount equal to 7% return on shareholders' equity, and no individual award may exceed 50% of a participant's base salary. Awards are paid in cash on a current basis unless a participant elects to defer receipt of all or a portion of his award until termination of his employment.

Not included in the incentive compensation awards shown above are deferred compensation awards made in 1972, including annual appreciation on prior years' compensation accounts, as

follows: Henry T. Mudd, \$19,462; Kenneth Lieber, \$8,719; Donlin P. Murdy, \$8,601; Paul W. Allen, \$8,558; other officers and key employees, \$28,134, for a total of \$73,474. Key executives participating in the Incentive Compensation Plan may also be entitled to receive such annual deferred compensation awards. A deferred compensation award is computed as the product of the "deferred compensation ratio" (currently one-half of a participant's target incentive ratio) under the Incentive Compensation Plan for the fiscal year. Such awards are credited to the participant's deferred compensation account and are payable to the recipient or his beneficiary in equal annual installments over a period of ten years commencing with retirement or termination. The awards are subject to cancellation in the event that a participant's employment is terminated for cause or is terminated prior to reaching age 55 or completing five years of continuous service.

- (3) Savings Plan for Salaried Employees: Pursuant to the terms of the 1969 Savings Plan for Salaried Employees, each full-time salaried employee may contribute from 2% to 8% of his eligible salary (limited to the first \$24,000 of a participant's salary) for specified investments through a trustee. The Corporation contributes monthly an amount which, when added to forfeitures of any participants, equals 50% of total employee contributions for that month.
- (4) Retirement Plan: All salaried employees of the Corporation are eligible to participate in the Corporation's Retirement Plan which was established in 1951. Monthly retirement benefits are computed as a percentage of an employee's base compensation multiplied by the number of years of credited service with the Corporation. Benefits are payable from the date of normal retirement at age 65 until death, or upon disability or death occurring prior to normal retirement age. Provision is also made for the payment of adjusted benefits in the event of retirement occurring prior to or after normal retirement age. In lieu of normal monthly payments an employee may elect certain alternatives which will permit continuing payments to a surviving beneficiary. The Corporation pays the entire cost of all benefits under the Plan.

### Qualified Stock Options

The Corporation's Qualified Stock Option Plan was adopted by the Board of Directors on December 10, 1969, and was approved by the shareholders at the Annual Meeting held on May 5, 1970. The following tabulation shows as to certain directors and officers and as to all directors, officers and salaried employees as a group (i) the amount of options granted since January 1, 1972; (ii) the amount of shares acquired through exercise of options since that time; and (iii) the amount of shares subject to all unexercised options held as of December 31, 1972:

<u>Common Shares</u>	<u>Kenneth Lieber</u>	<u>Donlin P. Murdy</u>	<u>Paul W. Allen</u>	<u>All Directors, Officers and Other Salaried Employees as a Group</u>
Granted — January 1, 1972 to December 31, 1972:				
Number of Shares.....	—	—	—	4,000
Average per share option price..	—	—	—	\$32.03
Exercised.....	None	None	None	13,250
Unexercised at December 31, 1972:				
Number of Shares.....	9,500	10,000	8,700	100,600
Average per share option price..	\$27.57	\$28.25	\$27.89	\$28.32

## Non-Qualified Stock Options

The Corporation's Non-Qualified Stock Option Plan was adopted by the Board of Directors on July 14, 1971, and was approved by the shareholders at the Annual Meeting held on May 2, 1972. With the exception of an option for 7,200 shares granted to Henry T. Mudd (who received only a Non-Qualified Stock Option), all other options granted under the Non-Qualified Stock Option Plan were granted in tandem with identical grants under the Qualified Stock Option Plan. An exercise of a tandem option under either plan reduces pro tanto the number of shares exercisable under the other plan. The following tabulation shows as to certain directors and officers and as to all directors, officers and salaried employees as a group (i) the amount of options granted since January 1, 1972, (ii) the amount of shares acquired through exercise of options since that time; and (iii) the amount of shares subject to all unexercised options held as of December 31, 1972:

<u>Common Shares</u>	<u>Henry T. Mudd</u>	<u>Kenneth Lieber</u>	<u>Donlin P. Murdy</u>	<u>Paul W. Allen</u>	<u>All Directors, Officers and Other Salaried Employees as a Group</u>
Granted — January 1, 1972 to December 31, 1972:					
Number of Shares.....	—	—	—	—	4,000
Average per share option price.....	—	—	—	—	\$32.03
Exercised.....	None	None	None	None	None
Unexercised at December 31, 1972:					
Number of Shares.....	7,200	3,500	4,000	2,700	47,750
Average per share option price.....	\$30.69	\$30.69	\$30.69	\$30.69	\$30.80

## Indemnification of Directors and Officers of Cyprus

Section 29 of the By-Laws of Cyprus provides:

“Each director and officer of this corporation shall be indemnified by the corporation to the fullest extent permitted by the New York Business Corporation Law against any loss on account of (i) expenses incurred in defending or (ii) amounts paid to settle, satisfy a judgment or discharge a fine in any civil or criminal action or proceeding to which such director or officer is a party by reason of his being or having been such a director or officer of this corporation. Such indemnification shall extend to the estate and personal representative of a deceased director or officer.”

The New York Business Corporation Law would permit the Company to indemnify its officers and directors for the following:

(1) Reasonable expenses, including attorneys' fees, actually and necessarily incurred in the defense of, or an appeal of, a derivative suit, brought against an officer or director, unless he is adjudged to have breached his statutory duties to the corporation, or unless the action or threatened action is settled without court approval; but not amounts paid in settling or otherwise disposing of a threatened or pending action. (§ 722)

(2) Judgments, fines, amounts paid in settlement and reasonable expenses, including attorneys' fees actually and necessarily incurred as the result of an action, threatened action or proceeding, civil or criminal, or any appeal therein other than a derivative suit, brought against the officer or director by reason of his position as such or his service to the corporation in any capacity, if such officer or director acted in good faith, for a purpose which he reasonably believed to be in the best interests of the corporation, and, in criminal actions or proceedings, in addition, had no reasonable cause to believe his conduct was unlawful. (§ 723)

Such indemnification as may be made to officers and directors as aforesaid under New York Law, may under such law also be made to the estate or personal representatives of a deceased officer or director.



## NOMINATION AND ELECTION OF BAGDAD DIRECTORS

The stockholders of Bagdad will be asked to elect nine directors to serve until the effective date of the proposed merger if the merger is approved by the stockholders or, if the merger is not approved, to serve until the next annual meeting of stockholders or until the election and qualification of their successors. The Bagdad proxy committee will vote for the individuals named below to serve as such directors. Bagdad's management does not know of any nominee who will be unavailable, but should an unavailability occur, the proxy committee may vote with discretionary authority for a substitute.

The following table sets forth the names of the nominees for election to the Bagdad Board of Directors, the principal occupation of each, the period during which each has served as a director of Bagdad, and the number of shares of Bagdad Capital Stock, \$2.50 par value, beneficially owned, directly or indirectly, by each nominee as of January 31, 1973.

<u>Name</u>	<u>Principal Occupation</u>	<u>Director Since</u>	<u>Shares Beneficially Owned on January 31, 1973</u>
J. N. Anderson	Vice President — Metallurgy, Noranda Mines Limited Toronto, Canada	1972	10(1)
Walter R. Bimson	Personal Investments Phoenix, Arizona	1944	2,624
Robert C. Bogart	Vice President of Bagdad Bagdad, Arizona	1969	7,357
George W. Colville	Executive Vice President, General Manager and Treasurer of Bagdad Bagdad, Arizona	1955	26,770
William T. Garland	Chairman of the Board of Garland Steel Company (a subsidiary of Bagdad) Phoenix, Arizona	1967	1,244(2)
David C. Lincoln	President of Bagdad Phoenix, Arizona	1959	253,573(3)
Joseph T. Melczer, Jr.	Member of the law firm of Snell & Wilmer Phoenix, Arizona	1950	1,375
Frank L. Snell	Member of the law firm of Snell & Wilmer and Vice President of Bagdad Phoenix, Arizona	1944	3,580
Roxie L. Webb	Securities Broker Prescott, Arizona	1951	17,160(4)

(1) For the holdings of Noranda Mines Limited, see "Principal Stockholders of Bagdad".

(2) Includes 601 shares held in trust by Mr. Garland for the benefit of a minor child.

(3) See "Principal Stockholders of Bagdad".

(4) Includes 17,012 shares owned by Roxie Webb, Inc., a corporation controlled by Mr. Webb.

In voting for directors, the votes to which each stockholder is entitled will be multiplied by the number of directors to be elected, and any stockholder may cumulate his votes by casting them all in person or by proxy for one nominee or distribute them among two or more nominees.

Mr. David C. Lincoln and Mr. Frank L. Snell, presently members of the Board of Bagdad, will become members of the Cyprus Board of Directors if the merger is consummated. As Bagdad directors, Mr. Lincoln and Mr. Snell do not receive directors fees. As members of the Cyprus Board of Directors, each of them will receive a directors fee in the amount of \$300 for each meeting attended, together with an annual retainer of \$1,500.

## DIRECTORS AND OFFICERS OF BAGDAD

### Remuneration

The following table shows the direct aggregate remuneration paid by Bagdad and its subsidiaries for the year 1972 to two of its directors and officers and to a group consisting of them and one other director. It also shows estimated annual benefits payable under Bagdad's pension plan to Messrs. Bogart and Colville upon their retirement, based on their present salaries until normal retirement dates. In addition, Bagdad in 1969 contracted to pay Mr. Colville retirement income equal to that which would be payable under a participating annuity life insurance contract calling for a \$3,000 annual premium from 1969 to the time of his retirement.

<u>Name</u>	<u>Capacities in which Remuneration was Received</u>	<u>Aggregate Remuneration</u>	<u>Retirement Benefits</u>
Robert C. Bogart	Vice President of Bagdad	\$ 43,353	\$21,599
George W. Colville	Executive Vice President, General Manager and Treasurer of Bagdad	\$ 46,879	\$15,498
Three officers and directors, as a group	Officers and Directors of Bagdad or subsidiaries	\$114,015	

### Stock Options

Information appears below with respect to all those "restricted" or "qualified" options to purchase Bagdad Capital Stock, \$2.50 par value, which were granted to or exercised by Mr. Bogart and to or by him and Bagdad's other officers and directors, as a group, during the period from January 1, 1972 to January 31, 1973, and those outstanding options which were held by Mr. Bogart, Mr. Colville and Bagdad's officers and directors, as a group, at the end of such period.

<u>Stock Options*</u>	<u>Robert C. Bogart</u>	<u>George W. Colville</u>	<u>Officers and Directors as a Group</u>
Granted during the period:			
Number of shares.....	4,247	—	4,247
Average option price per share.....	\$36.56	—	\$36.56
Exercised during the period:			
Number of shares.....	470	—	3,391
Total price paid.....	\$ 8,249	—	\$ 44,814
Aggregate market value when exercised.....	\$15,393	—	\$141,361
Outstanding at January 31, 1973:			
Number of shares.....	6,108	2,948	9,056
Weighted average price per share.....	\$30.78	\$17.59	\$26.48

\* Numbers of shares and prices per share have been adjusted to give effect to intervening stock dividends.

The qualified stock option plan of Bagdad Copper Corporation will terminate as of the date of the merger. With respect to those employees of Bagdad who have been issued options under that corporation's plan and who have not fully exercised such options as of the date of the merger, Cyprus Mines Corporation will substitute, within the meaning of Section 425(a) of the Internal Revenue Code of 1954, new options on shares of Cyprus stock for those employees of Bagdad who become employees of Cyprus. Such substitute options will be issued under the qualified stock option plan of Cyprus and will be issued with reference to the number of unexercised options of each such Bagdad employee. The terms of the agreements pertaining to such substitute options, other than the option prices and the number of shares subject to the options, will be identical to the terms specified in the existing stock option agreements between Bagdad and its employees. The option price and number of shares subject to the options will be determined in such a manner for each employee receiving a substitute option so that the excess of the aggregate fair market value of the shares subject to the option immediately after the substitution over the aggregate option price of such shares will approximately equal (but not exceed) the excess of the aggregate fair market value of all shares subject to the option immediately before such substitution over the aggregate option price of such shares, to the extent such substitution can be made utilizing whole shares of stock, and

so that, on a share by share comparison, the ratio of the option price to the fair market value of the stock subject to the option immediately after the substitution will equal the ratio of the option price to the fair market value of the stock immediately before such substitution. It is presently contemplated that the foregoing basis of substitution will result in the issuance of Cyprus options for 1.2 times the number of shares covered by the Bagdad options, with the option price of each Cyprus share purchasable thereunder being approximately equal to 83.3% of the price for a Bagdad share as set out in the applicable Bagdad option.

### **Certain Transactions**

During 1972, fees for general legal services rendered to Bagdad and its subsidiaries were earned by Messrs. Snell & Wilmer in the amount of \$32,293. Frank L. Snell, a director and Vice President of Bagdad, Joseph T. Melczer, Jr., a director, and Don Corbitt, the Secretary of Bagdad, are members of that law firm.

During 1972 Bagdad and its subsidiaries purchased \$73,042 worth of equipment and supplies from Lincoln Electric Company, Cleveland, Ohio. David C. Lincoln is a director of Lincoln Electric Company and he and other members of the Lincoln family, together, own more than 10% of the stock of Lincoln Electric Company. During 1972 Bagdad and its subsidiaries purchased \$266,508 worth of equipment and supplies from Bearing, Belt and Chain, Inc. (and its predecessor), Phoenix, Arizona. William T. Garland is a director of Bearing, Belt and Chain, Inc. and owns approximately 14% of its outstanding capital stock. Purchases from Lincoln Electric Company and Bearing, Belt and Chain, Inc. were made in the ordinary course of business and on terms believed to be as favorable as could have been obtained elsewhere.

Within a six month period in 1972, Mr. Garland sold 1,000 shares of Bagdad capital stock and purchased 2,921 shares pursuant to the exercise of a qualified stock option. Section 16(b) of the Securities Exchange Act of 1934, and the rules promulgated thereunder, give Bagdad the right to recover \$22,222 from Mr. Garland as a consequence of his sale and purchase transactions. Mr. Garland has denied that any amount is lawfully due to Bagdad and agreed to indemnify Bagdad against any legal expense or claims arising as a result of the foregoing transactions. Bagdad does not presently intend to take any steps to recover such amount from Mr. Garland.

### **PRINCIPAL STOCKHOLDERS OF BAGDAD**

At January 31, 1973, more than 10% of Bagdad's outstanding Capital Stock, \$2.50 par value, was owned beneficially and of record by each of the following persons (according to information furnished by them):

<u>Name and Address</u>	<u>Number of Shares Owned</u>	<u>Percentage of Outstanding Shares</u>
David C. Lincoln 55 East Thomas Road Phoenix, Arizona 85012	253,573 (1)	15.8%
Joseph C. Lincoln 6320 East McDonald Drive Scottsdale, Arizona 85251	169,683	10.5%
Lillian L. Howell 435 Vista Grande Greenbrae, California 94904	170,053	10.6%
Lincoln Foundation, Inc. (2) 55 East Thomas Road Phoenix, Arizona 85012	162,217	10.1%
	<u>755,526</u>	<u>47.0%</u>
Noranda Mines Limited P. O. Box 45 Commerce Court West Toronto, Canada	<u>202,711</u>	<u>12.6%</u>

- 
- (1) Including shares held by Mr. Lincoln's wife, by her as custodian for their children and by Mr. Lincoln as trustee for beneficiaries which include such children, and excluding 4,685 shares owned beneficially by the Henry George School of Social Science in New York of which Mr. Lincoln is a trustee. Joseph C. Lincoln and Lillian L. Howell are David C. Lincoln's brother and sister.
  - (2) A non-profit corporation of which David C. Lincoln is the President, a director and an Executive Committee member. Joseph C. Lincoln is a Vice President and director, and Lillian L. Howell is a director.

The Lincoln interests have indicated that they intend to vote the 755,526 shares held by them in favor of the merger. Noranda Mines Limited, represented on the Bagdad Board of Directors by Mr. J. N. Anderson (see "Recommendation of Merger", page 2) has indicated uncertainty as to the manner in which it will vote its Bagdad shares on the merger, if at all. The possible conflict of interest indicated by Mr. Anderson in abstaining from a vote as a Director on the merger proposal relates to alternative approaches to expanding Bagdad's operations which were suggested by Noranda. There is no relationship between the Lincoln interests and Noranda Mines Limited.

#### **DESCRIPTION OF CYPRUS' COMMON AND PREFERRED STOCK**

The Company has presently outstanding one class of stock, par value \$4.00 per share, which is designated "Common Stock." The Restated Certificate of Incorporation of the Company authorizes 28,000,000 shares, of which 8,781,600 shares were outstanding, and of which an additional 107,800 shares were reserved for issuance upon exercise of options, as of December 31, 1972. The holders of the Company's Common Stock outstanding from time to time are entitled to receive such dividends as may be declared by the Board of Directors out of funds legally available therefor. All voting rights are presently vested in the holders of the Common Stock, each share being entitled to one vote. The shares do not have cumulative voting rights in the election of directors. The holders of the Common Stock are entitled, upon liquidation of the corporation, to share proportionately according to their respective share holdings in its net assets available for distribution. Shareholders have no preemptive rights to subscribe to additional shares. Shareholders have no right to convert the Common Stock into any other security, and the Common Stock is not subject to redemption. The Common Stock is fully paid and non-assessable, as will be the shares which are to be offered in this exchange. As in the case of all New York corporations, if the shares cease to be listed on a national securities exchange or regularly quoted in the over-the-counter market by one or more members of an affiliated association, the ten largest shareholders would become jointly and severally personally liable under Section 630(a) of the New York Business Corporation Law for all debts, wages or salaries due and owing to any of its laborers, servants or employees other than contractors for services performed by them for the Company to the extent that the Company may fail to pay the same; however, the Company's Board of Directors and management do not anticipate that the Common Stock will cease to be listed on a national securities exchange or regularly quoted in the over-the-counter market.

The Company's Restated Certificate of Incorporation also authorizes the issuance of 1,000,000 shares of Preferred Stock, par value \$4.00 per share, and empowers the Board of Directors to fix the dividend rights, dividend rate, conversion rights, voting rights, rights and terms of redemption (including sinking fund provisions), redemption price or prices, and liquidation preferences of unissued series of Preferred Stock and the number of shares constituting any such series and the designation thereof. No shares of Preferred Stock have been issued. The Company has no present plans for any particular issuance of Preferred Stock, but such shares are available for issuance at any time in the future, either for purposes of acquisition or for cash, without shareholder approval unless such approval is required by law or by one or more of the Stock Exchanges on which the Company's stock is listed.

Upon issuance, the holders of any series of Preferred Stock will have such preferences over the holders of Common Stock, including preferences as to dividends or upon liquidation, or both, and such

voting, conversion, redemption and other rights, as the Board of Directors shall determine in creating such series of Preferred Stock. The holders of Preferred Stock may be given voting rights not to exceed one vote per share. Upon the occurrence of certain events the holders of the Preferred Stock (whether or not they would otherwise have voting rights) would be entitled, separately as a class, to elect two directors or one-tenth of the number of directors constituting the Board, whichever is the greater. If any series of Preferred Stock is made convertible into shares of Common Stock, the conversion of such series could result in a dilution of the equity of the holders of the Common Stock, depending upon the conversion price or rate of conversion. Furthermore, if all of the shares of Preferred Stock were issued, the fixed dividend requirements of the Preferred Stock might be substantial.

Transfer Agent and Registrar for the Common Stock is Security Pacific National Bank, 124 West Fourth Street, Los Angeles, California. Co-Transfer Agent and Co-Registrar for the Common Stock is Morgan Guaranty Trust Company, 30 West Broadway, New York, New York 10015.

### **DESCRIPTION OF BAGDAD'S CAPITAL STOCK**

Bagdad's single authorized class of capital stock consists of 4,800,000 shares with a par value of \$2.50 per share. Each outstanding share entitles the holder of record thereof to one vote and to cumulate votes in the election of directors on the basis set out in "Nomination and Election of Bagdad Directors", page 40. No such cumulative voting rights attach to shares of Cyprus Common Stock into which the Bagdad shares would be converted upon consummation of the Merger.

Stockholders of Bagdad have no pre-emptive rights to subscribe for additional shares of its issue. Its outstanding capital stock is fully paid and non-assessable. Holders of Bagdad capital stock are entitled to dividends if, as and when declared by the Bagdad Board of Directors for distribution out of funds legally available therefor, with all outstanding shares being entitled to participate equally in such distributions. If Bagdad were to be liquidated, the holders of its capital stock would participate prorata in the distribution of net assets after provision for its indebtedness.

But for the difference in cumulative voting rights discussed above and the absence of a provision applicable to Arizona corporations similar to that discussed under "Description of Cyprus' Common and Preferred Stock" with respect to non-payment of amounts owing for services, there are no major variations between the principal features of the Bagdad capital stock and the Cyprus Common Stock.

### **EXPERTS**

The Financial Statements included herein are in reliance upon the reports (to the extent indicated herein) of Lybrand, Ross Bros. & Montgomery and Price Waterhouse & Co., both independent public accountants, and upon the authority of said firms as experts in accounting and auditing.

### **GENERAL**

The persons named in the enclosed Proxy have no present intention of bringing before the annual meetings of stockholders for action any matters other than those specifically referred to above, nor have the managements of Cyprus and Bagdad any such intention; and neither such persons nor such managements are aware of any matters which may be presented by others. If any other business should properly come before the meetings, the persons named in the Proxy intend to vote thereon in accordance with their best judgment.

ALL STOCKHOLDERS, WHETHER OR NOT THEY EXPECT TO ATTEND THE MEETINGS, ARE URGED TO COMPLETE, SIGN AND RETURN THE ACCOMPANYING PROXY CARD PROMPTLY.

BY ORDER OF THE BOARD OF DIRECTORS  
OF CYPRUS MINES CORPORATION

GERALD G. KELLY  
Secretary

March 27, 1973

BY ORDER OF THE BOARD OF DIRECTORS  
OF BAGDAD COPPER CORPORATION

DON CORBITT  
Secretary

March 31, 1973

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\* 1968 and 1969 are not covered by Accountants' Report.

Also included in the following Financial Statements are the financial statements of a Cyprus affiliate (Marcona Corporation) see pages 61-70.

## **REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS**

To the Board of Directors of  
Cyprus Mines Corporation

We have examined the parent and consolidated balance sheets of Cyprus Mines Corporation and Cyprus Mines Corporation and subsidiaries as of December 31, 1972, and the related parent and consolidated statements of income, retained earnings and changes in financial position for the three years then ended. Our examination 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. The financial statements for the two years ended December 31, 1971 have been restated for comparative purposes as explained in Note (a) of Notes to Consolidated Statement of Income. We concur in the restatements. We did not examine the consolidated financial statements of Marcona Corporation and subsidiary companies, a nonconsolidated significant affiliated corporation, which statements were examined by other independent accountants whose report thereon has been furnished to us. The opinion of other independent accountants is subject to the recovery of certain Peruvian income tax assessments and related matters, as described in Note 4 of Notes to Financial Statements. In our opinion, the effect of any adjustments with respect to this is not material to the financial statements of Cyprus Mines Corporation and Cyprus Mines Corporation and subsidiaries. Our opinion expressed herein, insofar as it relates to the amount included in the investment asset as equity in undistributed earnings of Marcona Corporation and subsidiaries, \$72,200,000 at December 31, 1972, and equity in earnings of \$9,196,000 (1972), \$12,035,000 (1971), and \$9,475,000 (1970) is based solely upon such report, excluding the effect of the Peruvian income tax assessment recovery matter noted above.

In our opinion, based upon our examination and the report of other auditors, the aforementioned Cyprus Mines Corporation and Cyprus Mines Corporation and subsidiaries financial statements present fairly their parent and consolidated financial position at December 31, 1972, their respective results of operations and changes in financial position for the three years then ended, all in conformity with generally accepted accounting principles consistently applied during the periods and on a basis consistent with that of the preceding year.

**LYBRAND, ROSS BROS. & MONTGOMERY**

Los Angeles, California  
February 20, 1973



**CYPRUS MINES CORPORATION  
AND  
CYPRUS MINES CORPORATION AND SUBSIDIARIES**

**BALANCE SHEETS**

**December 31, 1972**

**(Dollars in Thousands Except Per Share Amounts)**

ASSETS:	Consolidated	Parent
Current:		
Cash and time certificates of deposit.....	\$ 3,086	\$ 991
Marketable securities, at cost plus accrued interest (approximately market).....	1,382	1,382
Accounts receivable, principally trade.....	30,113	15,369
Inventories, at the lower of cost (average cost) or market (Note 2)....	40,875	25,814
Supplies and spare parts, at cost.....	7,037	1,363
Prepaid expenses.....	1,285	1,003
Total current assets.....	<u>83,778</u>	<u>45,922</u>
Property, plant and equipment, net of depreciation and depletion (Note 3)....	178,417	47,643
Investments in and advances to affiliated corporations (Note 4).....	91,238	79,259
Investments in and advances to subsidiaries (Note 4).....		<u>87,123</u>
Deferred charges and other assets:		
Deferred mineral exploration (Note 1).....	6,675	(268)
Other (Note 8).....	8,748	4,621
Total deferred charges and other assets.....	<u>15,423</u>	<u>4,353</u>
	<u>\$368,856</u>	<u>\$264,300</u>
 <b>LIABILITIES AND SHAREHOLDERS' EQUITY:</b>		
Current:		
Short-term borrowing.....	\$ 3,000	
Current portion of long-term loans (Note 6).....	9,436	
Accounts payable.....	11,661	\$ 5,207
Accrued pension costs.....	2,302	1,865
Accrued employee compensation.....	2,496	1,749
Other accrued expenses.....	5,271	2,525
Foreign and domestic income taxes.....	5,757	4,153
Total current liabilities.....	<u>39,923</u>	<u>15,499</u>
Long-term loans (Note 6).....	22,276	
Deferred income taxes (Note 5).....	36,117	22,951
Minority interests in subsidiaries.....	44,690	
Contingent liabilities and commitments (Note 7)		
Shareholders' equity (Note 9):		
Preferred Stock, par value \$4 per share, authorized 1,000,000 shares, none issued.....	—	—
Common Stock, par value \$4 per share, authorized 28,000,000 shares, issued 8,969,000 shares.....	35,876	35,876
Capital surplus.....	73	73
Retained earnings (Note 4).....	189,901	189,901
Total shareholders' equity.....	<u>225,850</u>	<u>225,850</u>
	<u>\$368,856</u>	<u>\$264,300</u>

The accompanying notes are an integral part of this statement.

**CYPRUS MINES CORPORATION**  
**STATEMENT OF INCOME (PARENT)**  
**For the three years ended December 31, 1972**  
**(Dollars in Thousands)**

	<u>1970</u>	<u>1971</u>	<u>1972</u>
Income:			
Revenues from operations.....	\$113,841	\$107,332	\$112,527
Costs:			
Operating.....	84,636	84,840	93,071
Depreciation and depletion (Note 3).....	8,497	7,288	5,179
	<u>93,133</u>	<u>92,128</u>	<u>98,250</u>
Gross profit from operations.....	20,708	15,204	14,277
Equity in earnings of affiliated corporations (Note 4).....	9,816	12,268	9,710
Equity in earnings of subsidiaries (Note 4).....	12,089	12,204	15,338
Interest income and other dividends.....	1,919	2,038	858
Gross profit and other income.....	<u>44,532</u>	<u>41,714</u>	<u>40,183</u>
Expenses:			
General and administrative.....	4,300	3,936	3,931
Mineral exploration (Note 1).....	4,194	1,912	2,747
Interest.....	884	289	74
Other.....	189	(140)	(204)
Total expenses.....	<u>9,567</u>	<u>5,997</u>	<u>6,548</u>
Income before foreign and domestic income taxes..	34,965	35,717	33,635
Provision for foreign and domestic income taxes (Note 5).....	7,603	7,963	4,821
Net income.....	<u>\$ 27,362</u>	<u>\$ 27,754</u>	<u>\$ 28,814</u>

The accompanying notes are an integral part of this statement.

**CYPRUS MINES CORPORATION  
AND  
CYPRUS MINES CORPORATION AND SUBSIDIARIES**

**PARENT AND CONSOLIDATED STATEMENT OF RETAINED EARNINGS**

**For the five years ended December 31, 1972**

**(Dollars in Thousands, Except Per Share Amounts)**

	<b>Consolidated Not Covered by Accountants' Report</b>		<b>Parent and Consolidated</b>		
	<b>1968</b>	<b>1969</b>	<b>1970</b>	<b>1971</b>	<b>1972</b>
Balance, beginning of year.....	\$128,707	\$132,699	\$152,775	\$154,342	\$171,440
Net income.....	21,321	27,062	27,362	27,754	28,814
	150,028	159,761	180,137	182,096	200,254
Less:					
Purchase of treasury shares (Note 9).....	(10,669)	(466)	(4,955)	(1,568)	(1,341)
Transfer to capital, giving effect to 100% stock distribution.....			(13,422)		
Cash dividends paid, \$.70 (1968), \$.70 (1969), \$.80 (1970), and \$1.00 (1971 and 1972) per share.....	(6,660)	(6,520)	(7,418)	(9,088)	(9,012)
Balance, end of year (Note 4).....	<u>\$132,699</u>	<u>\$152,775</u>	<u>\$154,342</u>	<u>\$171,440</u>	<u>\$189,901</u>

The accompanying notes are an integral part of this statement.

**CYPRUS MINES CORPORATION AND SUBSIDIARIES**

**CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION**

**For the three years ended December 31, 1972**

**(Dollars in Thousands)**

	<u>1970</u>	<u>1971</u>	<u>1972</u>
Source of working capital:			
Net income.....	\$27,362	\$27,754	\$28,814
Add amounts recognized in determining income which did not use working capital:			
Depreciation, cost depletion and loss on abandonment or disposal.....	18,746	18,856	24,389
Deferred income taxes.....	5,248	7,535	3,540
Minority interests.....	2,804	4,093	7,284
Provision for loss on mineral exploration prospects.....	3,853	2,720	3,154
Deduct undistributed earnings of affiliated corporations....	(7,392)	(8,450)	(5,400)
Working capital provided from operations.....	50,621	52,508	61,781
Proceeds of long-term loans.....	561	3,998	381
Reduction in advance due from affiliated corporations.....	456	1,615	
Book value of properties sold or retired.....	707	1,151	889
Decrease in other assets.....		1,481	
Total sources.....	<u>52,345</u>	<u>60,753</u>	<u>63,051</u>
Use of working capital:			
Additions to properties.....	24,259	38,120	21,113
Expenditures on mineral exploration prospects.....	3,790	4,428	4,185
Repayment of long-term loans.....	13,966	9,516	13,021
Increase in advances to affiliated corporations.....			2,448
Dividends.....	7,418	9,088	9,012
Cost of treasury shares acquired.....	5,850	1,854	1,459
Increase in other assets.....	2,425		3,734
Retirement of liability from sale of production payment.....	6,113	228	
Total uses.....	<u>63,821</u>	<u>63,234</u>	<u>54,972</u>
Working capital increase (decrease).....	<u>(11,476)</u>	<u>(2,481)</u>	<u>8,079</u>
Increases (decreases) in working capital accounts:			
Cash and marketable securities.....	(13,260)	(5,227)	(8,759)
Accounts receivable.....	(3,199)	4,305	9,242
Inventories.....	5,988	1,617	3,308
Other current assets.....	92	98	581
Short-term borrowing.....		(7,500)	4,500
Current portion of long-term loans.....	(4,322)	4,426	120
Accounts payable and accrued liabilities.....	2,229	(3,902)	(2,498)
Foreign and domestic income taxes.....	996	3,702	1,585
Net increase (decrease) in working capital.....	<u>(\$11,476)</u>	<u>(\$ 2,481)</u>	<u>\$ 8,079</u>

The accompanying notes are an integral part of this statement.

# CYPRUS MINES CORPORATION

## STATEMENT OF CHANGES IN FINANCIAL POSITION (PARENT)

For the three years ended December 31, 1972

(Dollars in Thousands)

	<u>1970</u>	<u>1971</u>	<u>1972</u>
Source of working capital:			
Net income.....	\$27,362	\$27,754	\$28,814
Add amounts recognized in determining income which did not use working capital:			
Depreciation, cost depletion and loss on abandonment or disposal.....	8,497	7,288	5,179
Deferred income taxes.....	3,420	4,344	2,538
Provision for loss on mineral exploration prospects.....	3,537	1,195	2,417
Deduct undistributed earnings of affiliated corporations..	(7,012)	(7,993)	(4,744)
Deduct undistributed earnings of subsidiaries.....	(3,765)	(5,203)	(10,447)
Working capital provided from operations.....	32,039	27,385	23,757
Reduction in advance due from affiliated corporations.....	456	1,615	
Decrease in investment in subsidiaries.....		1,125	3,210
Book value of properties sold or retired.....	571	668	187
Decrease in other assets.....	148		
Total sources.....	<u>33,214</u>	<u>30,793</u>	<u>27,154</u>
Use of working capital:			
Additions to properties.....	7,793	6,368	10,032
Expenditures on mineral exploration prospects.....	1,736	1,877	1,890
Increase in investment in subsidiaries.....	7,253	5,243	5,387
Increase in investment in undistributed earnings of subsidiaries at liquidation.....		920	1,768
Repayment of long-term loans.....	5,714		
Increase in advances to affiliated corporations.....			2,448
Dividends.....	7,418	9,088	9,012
Cost of treasury shares acquired.....	5,850	1,854	1,459
Increase in other assets.....		723	1,795
Retirement of liability from sale of production payment.....	6,113	228	
Total uses.....	<u>41,877</u>	<u>26,301</u>	<u>33,791</u>
Working capital increase (decrease).....	<u>(8,663)</u>	<u>4,492</u>	<u>(6,637)</u>
Increases (decreases) in working capital accounts:			
Cash and marketable securities.....	(13,238)	(863)	(8,392)
Accounts receivable.....	9	(421)	3,122
Inventories.....	4,062	(446)	(234)
Other current assets.....	(1,540)	676	(358)
Current portion of long-term loans.....		5,714	
Accounts payable and accrued liabilities.....	78	(569)	(2,256)
Foreign and domestic income taxes.....	1,966	401	1,481
Net increase (decrease) in working capital.....	<u>(\$ 8,663)</u>	<u>\$ 4,492</u>	<u>(\$ 6,637)</u>

The accompanying notes are an integral part of this statement.

**CYPRUS MINES CORPORATION  
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CYPRUS MINES CORPORATION AND SUBSIDIARIES**

**NOTES TO FINANCIAL STATEMENTS**

**Note 1. Summary of Major Accounting Policies of Cyprus Mines Corporation:**

*A. Principles of Consolidation:*

The consolidated financial statements include all the wholly-owned subsidiaries of Cyprus Mines Corporation, as well as the following majority-owned subsidiaries, Anvil Mining Corporation Limited (Anvil) (60% owned) and Pima Mining Company (Pima) (50.01% owned). Intercompany transactions, profits and losses have been eliminated in consolidation.

Affiliated corporations which are owned 50% or less and which were formed to utilize joint resources and in which Cyprus management participates on an active basis and subsidiaries are accounted for on an equity basis. See Note 4 for a more complete explanation.

*B. Foreign Currency:*

In general, foreign currency is translated into U.S. dollars as follows: (1) Current assets and liabilities at rates prevailing on balance sheet date, (2) all other assets and liabilities, including property and related depreciation and depletion at historical cost, and (3) income and expense items (except depreciation and depletion) at effective rates prevailing during the year.

Gains or losses resulting from changes in currency fluctuations are included in the current year earnings. There have been no material gains or losses in the five years ended December 31, 1972.

*C. Mineral Exploration:*

Cyprus policy with respect to exploration of mining prospects is to defer costs and expenses incurred during the exploration period. Such costs and expenses are charged to income if the prospect is abandoned, or capitalized as cost of investment if the prospect is developed into a commercial property. Continuing reviews are made of all exploration prospects in order to provide a reserve on any exploration prospect when appropriate.

*D. Mine Development Cost:*

Cyprus follows the policy of capitalizing the cost of removal of overburden and waste material incident to the preparation of mineral sites, as well as similar costs incurred during the production period which are necessary to obtain access to the ore body. The total of these costs is estimated prior to operation and is charged to income through depletion on a unit-of-production basis over the estimated mineral reserves.

**Note 2. Inventories:**

Inventories consist principally of metal concentrates, metals, industrial minerals, and manufactured wire and tubing, all of which are valued on a moving average cost basis, but not in excess of net realizable value. The amounts of inventories used in the computation of costs of operations are, in thousands of dollars:

	<b>December 31</b>			
	<b>1969</b>	<b>1970</b>	<b>1971</b>	<b>1972</b>
Parent:				
Metal concentrates, metals and industrial minerals.....	\$ 3,569	\$ 3,909	\$ 3,540	\$ 3,638
Copper and aluminum wire and cable.....	18,863	22,585	22,508	22,176
	<u>\$22,432</u>	<u>\$26,494</u>	<u>\$26,048</u>	<u>\$25,814</u>
Consolidated:				
Metal concentrates, metals and industrial minerals.....	\$11,100	\$13,365	\$15,059	\$18,699
Copper and aluminum wire and cable.....	18,862	22,585	22,508	22,176
	<u>\$29,962</u>	<u>\$35,950</u>	<u>\$37,567</u>	<u>\$40,875</u>

**CYPRUS MINES CORPORATION  
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**NOTES TO FINANCIAL STATEMENTS (Continued)**

**Note 3. Property, Plant and Equipment, and Related Allowances for Depreciation and Depletion:**

Generally, charges against income for depletion and depreciation are based on the unit-of-production method for mineral properties and the straight-line method for all other assets. The following summary reflects the original cost of properties and the accumulated depreciation and depletion through December 31, 1972 and their net carrying value, in thousands of dollars:

	Consolidated			Parent		
	Gross Investment (at cost)	Depletion & Depreciation	Net Investment	Gross Investment (at cost)	Depletion & Depreciation	Net Investment
Land and Improvements.....	\$ 6,610	\$ 100	\$ 6,510	\$ 1,580		\$ 1,580
Depletable Properties, Developed.	\$106,421	\$ 55,524	\$ 50,897	\$21,064	\$12,760	\$ 8,304
Undeveloped Mineral Properties..	\$ 1,534		\$ 1,534	\$ 1,534		\$ 1,534
Depreciable Properties:						
Mining.....	\$147,609	\$ 51,623	\$ 95,986	\$31,230	\$17,654	\$13,576
Industrial Minerals.....	17,061	8,116	8,945	15,693	7,568	8,125
Manufacturing.....	19,962	5,629	14,333	19,962	5,629	14,333
Other.....	726	514	212	704	513	191
	<u>\$185,358</u>	<u>\$ 65,882</u>	<u>\$119,476</u>	<u>\$67,589</u>	<u>\$31,364</u>	<u>\$36,225</u>
Total.....	<u>\$299,923</u>	<u>\$121,506</u>	<u>\$178,417</u>	<u>\$91,767</u>	<u>\$44,124</u>	<u>\$47,643</u>

Estimated useful lives for depreciable assets are 5 to 20 years for mine buildings and equipment, 15 years for manufacturing buildings and equipment, 2 to 15 years for movable equipment, life of lease for leasehold improvements, and 5 to 10 years for general office equipment.

Upon the retirement of property, costs and accumulated depletion, depreciation or amortization are generally removed from the property accounts, and the balance of unrecovered costs, less salvage or sales proceeds, is charged or credited to income. Except in the case of Pima, no gain or loss is recognized on equipment traded-in; the balance of unrecovered cost is added to the cost of the equipment acquired. Pima accounts for trade-ins in the same manner as a retirement and records the new asset at invoice cost. Major construction and equipment added during the development stage at the Anvil mine are accounted for by the composite method, wherein replacements are charged to the accumulated depreciation reserve and proceeds from sales are credited to the same reserve.

Maintenance and repairs after the development stage are charged to income; betterments are capitalized.

**Note 4. Investments in Subsidiaries and Affiliated Corporations:**

In accounting for investments in subsidiaries and affiliated corporations, Cyprus includes in its investment account for each the cost of the capital stock acquired, its equity in the retained earnings as well as any advances made. It has been Cyprus policy to provide for deferred taxes that might become payable in the event of distribution of the unremitted earnings of each subsidiary and affiliated corporation (including the earnings of affiliated corporations' subsidiaries when the affiliated corporation has not provided taxes on the subsidiaries' earnings taken into income).

In accordance with Opinion No. 23 of the Accounting Principles Board of the American Institute of Certified Public Accountants, commencing in 1972, Marcona Corporation (Marcona), Cyprus' largest affiliated corporation, which had previously made no provision for taxes on the undistributed earnings of its subsidiaries, retroactively adopted the policy of providing for deferred taxes on that

**CYPRUS MINES CORPORATION  
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**NOTES TO FINANCIAL STATEMENTS (Continued)**

**Note 4. Investments in Subsidiaries and Affiliated Corporations (Continued):**

portion of undistributed earnings of its foreign subsidiaries which is not indefinitely invested abroad. The adoption of this accounting policy by Marcona has had the effect of reducing by \$11,463,000 both Cyprus' investment in that affiliated corporation and deferred federal income taxes provided prior to 1972 on Marcona's foreign subsidiaries' undistributed earnings. These reductions do not affect the reported net earnings in the accompanying statement of income for 1971 and prior, but result in a restatement of the investment in Marcona.

In accordance with the requirements of Opinion No. 23, Cyprus continues to provide deferred income taxes at appropriate rates on undistributed income of subsidiaries and affiliated corporations not considered to be indefinitely invested.

The following summarizes the consolidated balance sheet of 46%-owned Marcona at December 31, 1972, in thousands of dollars:

Assets:	
Current assets.....	\$ 70,990
Property, plant and equipment.....	172,374
Other assets.....	41,380
	<u>\$284,744</u>
Liabilities and shareholders' equity:	
Current liabilities.....	\$ 34,178
Long-term liabilities and reserves.....	90,987
Shareholders' equity.....	159,579
	<u>\$284,744</u>

Cyprus' recorded interest in Marcona was \$74,894,000 at December 31, 1972.

The Supreme Court of Peru has affirmed a 1971 decision of an appellate court to the effect that a Marcona subsidiary's operations on a mining concession assigned from an instrumentality of the Government of Peru did not qualify for depletion deductions in computing income taxable in Peru. Based upon this decision, additional taxes and penalties have been assessed for the years 1957-1969, aggregating approximately \$17.9 million after crediting approximately \$2 million for tax overpayments in prior years. The subsidiary has arranged with the Peruvian Banco de la Nacion for payment of the additional assessment in monthly installments over a period of ten years.

Peruvian counsel have advised Marcona that under the provisions of the concession agreement, the Peruvian Government instrumentality is obligated to indemnify the Marcona subsidiary against loss for the additional assessment. Based upon this advice, Marcona considers that no loss will be sustained as a result of the additional assessment. Accordingly, no liability for this item has been recorded in Marcona's financial statements.

Marcona and the Government of Peru are engaged in negotiations which contemplate that an agency of the Government will purchase a 25% interest in the subsidiary's Peruvian assets for a fair value. Following this transaction, if consummated, the Peruvian mining operations would be conducted by the parties as a Special Mining Enterprise owned 75% by Marcona which would also manage the operation.



**CYPRUS MINES CORPORATION  
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CYPRUS MINES CORPORATION AND SUBSIDIARIES**

**NOTES TO FINANCIAL STATEMENTS (Continued)**

**Note 4. Investments in Subsidiaries and Affiliated Corporations (Continued):**

The composition of Cyprus' equity interest in all subsidiaries and affiliated corporations at December 31, 1972 was as follows, in thousands of dollars:

	<b>Affiliated Corporations</b>		<b>Subsidiaries of Parent</b>
	<b>Consolidated</b>	<b>Parent</b>	
Equity in undistributed earnings:			
Included in Cyprus retained earnings.....	\$65,215	\$62,472	\$40,292
Included in liability for deferred income taxes, payable upon distribution of earnings.....	12,239	11,964	4,174
Cost of investments.....	13,784	4,823	42,657
Total investment.....	<u>\$91,238</u>	<u>\$79,259</u>	<u>\$87,123</u>

There is no material difference between the carrying value of the investment in affiliated corporations and subsidiaries and the Company's equity in underlying net assets of such companies at December 31, 1972.

**Assets and Liabilities of Foreign Subsidiaries Consolidated December 31, 1972 (in thousands):**

Current assets.....	\$ 21,654
Property, plant and equipment net of depreciation and depletion.....	100,406
Other assets.....	5,602
	<u>\$127,662</u>
Current liabilities.....	\$ 21,286
Long-term loans and other liabilities.....	62,735
Net assets.....	43,641
	<u>\$127,662</u>

**Note 5. Income Taxes:**

The parent's foreign and domestic income taxes expense is summarized as follows, adjusted in 1971 and 1970 for the Marcona restatement, in thousands of dollars:

	<b>1970</b>	<b>1971</b>	<b>1972</b>
Foreign income taxes:			
Currently payable.....	\$3,671	\$3,202	\$2,110
Deferred.....	1,002	334	761
	<u>\$4,673</u>	<u>\$3,536</u>	<u>\$2,871</u>
Federal income taxes:			
Currently payable.....	\$ 50	\$ 144	\$ 144
Deferred.....	2,219	3,375	1,194
	<u>\$2,269</u>	<u>\$3,519</u>	<u>\$1,338</u>
State income taxes.....	\$ 661	\$ 908	\$ 612
Total.....	<u>\$7,603</u>	<u>\$7,963</u>	<u>\$4,821</u>

Deferred income taxes aggregate \$36,117,000 (consolidated) and \$22,951,000 (parent) at December 31, 1972 and relate principally to timing differences associated with the deduction of depreciation, mine development costs and other expenses for income tax purposes. Cyprus applies the

**CYPRUS MINES CORPORATION  
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**NOTES TO FINANCIAL STATEMENTS (Continued)**

**Note 5. Income Taxes (Continued):**

investment tax credit as a reduction of federal income taxes payable in the year earned. The investment tax credit had no effect on the parent's taxes for 1972, 1971 and 1970.

Because of certain Canadian tax regulations, it is expected that Anvil will pay no Canadian income taxes on its earnings for 1972 and prior years. Cyprus' share of the accumulated earnings of Anvil at December 31, 1972 approximates \$9,000,000 for which no United States income tax has been provided as such earnings are considered to be permanently invested.

The Company determines income taxes currently payable and deferred on an estimated basis for Income Statement purposes. After preparation of income tax returns, the amount currently payable is adjusted by reclassification to the deferred tax which affects the amount shown in the Statement of Changes in Financial Position of the current period.

Consolidated deferred income taxes provided for the three years ended December 31, 1972 are reconciled with amounts reported on the Consolidated Statement of Changes in Financial Position, in thousands:

	<u>1970</u>	<u>1971</u>	<u>1972</u>
Deferred income tax provision:			
Foreign.....	\$ 730	\$ 398	\$ 781
Federal.....	4,319	6,501	2,176
Total.....	<u>5,049</u>	<u>6,899</u>	<u>2,957</u>
Reclassification with prior year currently payable provisions.....	201	644	587
Foreign withholding payments.....	<u>(2)</u>	<u>(8)</u>	<u>(4)</u>
Deferred income taxes reported on Consolidated Statement of Changes in Financial Position....	<u>\$5,248</u>	<u>\$7,535</u>	<u>\$3,540</u>

**Note 6. Long-Term Loans at December 31, 1972, in thousands of dollars:**

	<u>Due in One Year</u>	<u>Due after One Year</u>
Owed by 60%-owned Anvil (Note A):		
7½ % bank loans, collateralized by First Mortgage Bonds, payable in United States dollars in semi-annual installments, with the final payment due September 30, 1975.....	\$ 9,000	\$11,000
7.2% Mortgage Bonds (subordinated) payable in 14,000,000 German Deutschmarks on December 31, 1975, with accrued interest compounded semi-annually.....	—	4,931
Other, principally 8½ % 25-year mortgages on townsite housing units.....	114	4,253
Owed by 50.01%-owned Pima:		
Installment loans on land purchases from various parties, interest rates from 4% to 7% with final installments due from 7 to 9 years.....	322	2,092
	<u>\$ 9,436</u>	<u>\$22,276</u>

The amounts due after one year are payable approximately: 1974 — \$7,421; 1975 — \$9,356; 1976 — \$437; 1977 — \$442; and thereafter \$4,620.

Note A — At December 31, 1972 the net investment serving as collateral for long-term loans payable was \$66,595,000. With respect to the bank loans owed by Anvil, Cyprus agreed to guarantee the repayment of installments and maintain minimum Anvil working capital requirements.

**CYPRUS MINES CORPORATION  
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**NOTES TO FINANCIAL STATEMENTS (Continued)**

**Note 7. Contingent Liabilities and Commitments:**

There is pending in the Arizona Superior Court for Pima County a suit filed on November 25, 1969, by Farmers Investment Company, an Arizona corporation, requesting that Pima and several other major mining companies be enjoined from obtaining and using water for mining operations under circumstances that are alleged to be injurious to the plaintiff. Monetary damages now have been requested by the plaintiff in the sum of \$70,000,000 and the plaintiff has requested an accounting from Pima as to the profits and gains realized from the allegedly wrongful taking of water by Pima. It is the opinion of counsel that Pima will not be deprived of the water necessary to operate its mine and that any monetary recovery against Pima will not be material in amount.

A "30-day letter" was issued on October 23, 1972 by the United States Internal Revenue Service against Pima with respect to the years 1964 through 1968 in the amount of \$3,344,675. Pima has responded with a written protest and is in the process of appealing the proposed assessment to higher levels within the Internal Revenue Service. Cyprus does not expect that the 30-day letter will result in adverse consequences.

Litigation affecting Marcona is described in Note 4.

For information with respect to the Cyprus Incentive Compensation Plan, see page 30.

In the normal course of business, Cyprus has made substantial commitments for acquisition or construction of property, plant and equipment and for investment in ventures.

**Note 8. Acquisition of Rome Cable Assets:**

The final cost of the assets of Rome Cable Corporation which were acquired on October 31, 1967 has been the subject of litigation since that time. Cyprus made a provisional payment of \$40,500,000 for the assets. The United States Court of Appeals for the Third Circuit on September 22, 1972 determined that the purchase price payable by Cyprus to the former owners of Rome Cable Corporation should be approximately \$44,500,000 including interest and costs. The amount of judgment in excess of the provisional payment has been paid to the former owners. \$2,300,000 of the excess payment is being carried in deferred charges awaiting allocation to the assets acquired. In the opinion of management, the ultimate allocation of the purchase price will not have a material effect upon the operating results of Cyprus.

**Note 9. Stockholders' Equity:**

The shareholders on May 5, 1970 approved the 1969 Qualified Stock Option Plan under which not more than 460,000 shares of Common Stock may be issued to key employees. On May 2, 1972, the shareholders approved the 1971 Non-Qualified Stock Option Plan under which up to 450,000 shares of Common Stock may be issued to key employees, subject to the limitation, however, that options must be granted under the Non-Qualified Plan only in such a manner that the total number of shares which may be issued under both the Qualified and Non-Qualified plans shall not exceed 460,000 shares. Grants made under either plan must be at prices equal to 100% of the fair value of the shares on the date the option is granted. Under both plans, options cannot be exercised until one year after the date of the grant, and then become exercisable as to 25% of the shares each year. Options granted under the Qualified Plan remain exercisable for five years after the date of the grant, whereas options granted under the Non-Qualified Plan remain exercisable for ten years after the date of the grant.

Options covering 4,000 shares and 44,350 shares were granted in 1972 and 1971, respectively, under "tandem" agreements which enable each employee, at the time of exercising his option, to elect

**CYPRUS MINES CORPORATION  
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**NOTES TO FINANCIAL STATEMENTS (Continued)**

**Note 9. Stockholders' Equity (Continued):**

between the Qualified or Non-Qualified plans. Cyprus makes no charge to income with respect to stock options. Common shares available for option were 325,150 at December 31, 1971 and 344,950 at December 31, 1972. Additional information with respect to stock options is:

	<u>Number of Shares</u>	<u>Option Price</u>		<u>Market Value</u>	
		<u>Per Share</u>	<u>Aggregate</u> (Thousands)	<u>Per Share</u>	<u>Aggregate</u> (Thousands)
Options outstanding at December 31, 1972, listed by date of grant:					
December 18, 1969.....	47,850	\$26.625	\$1,274	(a)	(a)
June 10, 1970.....	10,800	25.75	278		
April 1, 1971.....	1,400	33.625	47		
December 22, 1971.....	43,750	30.6875	1,343		
March 8, 1972.....	1,000	37.375	37		
December 26, 1972.....	3,000	30.25	91		
	<u>107,800</u>		<u>\$3,070</u>		
Options becoming exercisable:					
1970.....	15,025	\$26.625	\$400	\$26.75 (b)	\$402
1971.....	17,725	25.75 - 26.625	470	32.00 - 39.75	588
1972.....	29,012	25.75 - 33.625	817	30.00 - 35.50	891
Options exercised:					
1970 and 1971.....	None				
1972.....	7,250	26.625 - 27.9375	194	35.625 - 36.875 (c)	265

(a) Market prices at dates of grant are the same as the option prices.

(b) Market price at dates becoming exercisable.

(c) Market price at dates exercised.

At December 31, 1972, a total of 62,600 shares of the outstanding Common Stock was subject to repurchase under Cyprus' Executives' Stock Purchase Plan. That Plan was terminated as of May 5, 1970, without prejudice, however, to the rights and obligations of plan participants as of that date.

During the three years ended December 31, 1972 Cyprus acquired treasury stock:

	<u>Number of Shares, Net of Resales</u>	<u>Cost</u>
1970.....	223,800	\$5,850,000
1971.....	71,500	1,854,000
1972.....	47,700	1,459,000

The total number of common shares repurchased and not resold at December 31, 1972 was 822,000 at a cost of \$22,074,000. The Board of Directors has authorized the cancellation of these shares and

**CYPRUS MINES CORPORATION  
AND  
CYPRUS MINES CORPORATION AND SUBSIDIARIES**

**NOTES TO FINANCIAL STATEMENTS (Continued)**

**Note 9. Stockholders' Equity (Continued):**

their return to an unissued status. This cancellation has been reflected in the accompanying financial statements as if it occurred in the year of purchase, after giving effect to reissuances.

**Capital Surplus Analysis:**

Balance, January 1, 1968 and December 31, 1968.....	\$4,696,000
Excess of sales price over cost of treasury shares sold under Executives' Stock Purchase Plan in 1969.....	506,000
Balance, December 31, 1969.....	5,202,000
Transfer to Common Stock in conjunction with stock split recorded in 1970.....	(5,202,000)
Balance, December 31, 1970 and 1971.....	—
Excess of sales price over par value of Common Stock issued pursuant to exercise of stock options in 1972.....	73,000
Balance, December 31, 1972.....	<u>\$ 73,000</u>

**Note 10. Pensions:**

Cyprus accounting policy concerning pensions is to charge to expense, the normal cost, interest on the unfunded past service cost, and under certain circumstances a provision for vested benefits. Adjustments for actuarial gains or losses are amortized ratably over the remaining average active life-span of the participants. The pension expense for 1970, 1971, and 1972 was \$865,000, \$1,231,000 and, \$1,499,000, respectively. At December 31, 1972 the actuarially computed liabilities of vested benefits exceed the funded assets by approximately \$1,995,000, which arose from a plan change in 1970.

**Note 11. Subsequent Event:**

In January 1973, the Board of Directors agreed, subject to shareholders' approval, to acquire Bagdad Copper Corporation through the issuance of 1.2 Cyprus shares for each Bagdad share outstanding. It is intended to account for the transaction as a pooling-of-interests.

**Note 12. Supplementary Profit and Loss Information:**

Amounts charged to costs and expenses, in thousands of dollars:

	Consolidated			Parent		
	1970	1971	1972	1970	1971	1972
Maintenance and repairs**.....	\$11,203	\$11,858	\$16,864	\$ 5,080	\$ 5,059	\$ 4,809
Depreciation and depletion of property, plant and equipment.....	18,746	18,856	24,389	8,497	7,288	5,179
Taxes other than income taxes						
Real and personal property.....	2,227	2,716	3,623	637	746	853
Other.....	4,085	4,030	4,356	1,554	1,810	1,670
	<u>6,312</u>	<u>6,746</u>	<u>7,979</u>	<u>2,191</u>	<u>2,556</u>	<u>2,523</u>
Rents.....	984	943	1,345	880	834	837
Royalties.....	3,039	2,834	1,758	1,469	1,414	1,411
Advertising costs.....	*	*	148	*	*	142
Research and development costs.....	*	*	468	*	*	468

\* Amounts for 1970 and 1971 have not been determined for this report.

\*\* Maintenance and repair costs (consolidated) were also charged to mine development costs capitalized in the amounts of \$3,233 (1970), \$3,306 (1971), and \$3,292 (1972).

## **REPORT OF INDEPENDENT ACCOUNTANTS**

To the Board of Directors and Stockholders of  
Marcona Corporation

We have examined the consolidated balance sheet of Marcona Corporation and subsidiary companies as of December 31, 1972 and the related consolidated statements of earnings and of changes in financial position for the three years then ended. Our examinations were 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.

As explained in Notes 3(c) and 3(d) to the financial statements, the Corporation's subsidiary operating in Peru has been assessed additional taxes and penalties aggregating approximately \$20 million. Since the Corporation believes that the concession agreement with a Peruvian government agency provides for indemnification against such assessments, this additional assessment, payable to the Peruvian Banco de la Nacion, is not reflected in the accompanying financial statements except to the extent that monthly installments on a ten-year payment schedule are being recorded as a claim receivable. The Corporation has commenced negotiations with the Peruvian government to sell at fair value a 25% interest in the Peruvian branch assets of its subsidiary and a portion of the consideration to be received may be applied to the settlement of the unpaid balance owing to the Peruvian Banco de la Nacion.

To comply with Accounting Principles Board Opinion No. 23, U.S. deferred income taxes have been provided retroactively with respect to certain undistributed earnings of consolidated foreign subsidiaries, as described in Note 1 to the financial statements.

In our opinion, subject to the effect, if any, on the consolidated financial statements of the results of negotiations with the Peruvian government and settlement of the balance owing to the Peruvian Banco de la Nacion and related claim receivable from the Peruvian government agency referred to in the second preceding paragraph, the consolidated financial statements examined by us present fairly the financial position of Marcona Corporation and subsidiary companies at December 31, 1972, the results of their operations and the changes in financial position for the three years then ended, in conformity with generally accepted accounting principles applied on a consistent basis after restatement for the change, with which we concur, referred to in the preceding paragraph.

PRICE WATERHOUSE & CO.

San Francisco, California  
February 20, 1973

**MARCONA CORPORATION  
AND SUBSIDIARY COMPANIES**

**CONSOLIDATED BALANCE SHEET**

**December 31, 1972**

**A S S E T S**

**In Thousands**

**Current assets:**

Cash and short-term securities (principally short-term Eurodollar certificates of deposit).....	\$ 34,443
Accounts receivable.....	13,664
Iron ore inventory.....	4,423
Operating materials and supplies.....	12,099
Prepaid taxes, insurance and other expense.....	947
Costs applicable to voyages in progress.....	5,414
Total current assets (Note 3).....	70,990
Investments in foreign securities, at cost (market value — \$33,100,000).....	29,410
Payments applicable against future Peruvian income taxes.....	3,868
Other investments and assets, at the lower of cost or net realizable value.....	8,102
Plant and equipment, at cost, less accumulated depreciation (Notes 3, 4, and 5).....	172,374
	<u>\$284,744</u>

**LIABILITIES AND STOCKHOLDERS' EQUITY**

**Current liabilities:**

Notes payable to banks.....	\$ 4,000
Accounts payable and accrued expenses (Note 9).....	13,112
Income taxes payable (Notes 1 and 6).....	1,596
Current portion of long-term debt (Note 5).....	9,878
Revenues applicable to voyages in progress.....	5,592
Total current liabilities (Note 3).....	34,178
Long-term debt, less current portion (Notes 3 and 5).....	51,165
Provision for accumulated severance indemnities.....	7,165
Deferred income taxes (Notes 1 and 6).....	32,657

**Stockholders' equity:**

**Capital stock (Note 7):**

Class A-C and A-U, 10% noncumulative, \$10.00 par value — 50 shares each authorized and outstanding.....	1
Class B, \$0.25 par value — 1,000,000 shares authorized and outstanding, at stated value.....	9,335
Class C, \$5.00 par value — 10,000 shares authorized, 7,500 shares outstanding.....	38
Retained earnings (Notes 2 and 5).....	150,205
	<u>159,579</u>

Commitments and contingent liabilities (Notes 3 and 8)

\$284,744

**MARCONA CORPORATION  
AND SUBSIDIARY COMPANIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 3 — Marcona Mining Company — Peruvian branch operations (Continued):**

Mineroperu, another agency of the Government of Peru, is to acquire the assets and assume the liabilities, rights and obligations relating to the mining activities of Santa effective February 28, 1973.

(b) Net assets — The following table summarizes the net assets of the Peruvian branch of Marcona Mining Company at December 31, 1972:

Current assets.....	\$ 20,270,000
Investments and other assets.....	5,121,000
Plant and equipment, net.....	80,274,000
Total assets.....	105,665,000
Current liabilities.....	8,980,000
Long-term liabilities and other credits.....	12,848,000
Total liabilities.....	21,828,000
Net assets.....	<u>\$ 83,837,000</u>

Of the Peruvian branch liabilities at December 31, 1972, \$8,862,000 are payable outside of Peru.

(c) Taxes on income — The taxing authorities in Peru in a prior year took the position that Marcona Mining Company's operations on the mining concession assigned from Santa did not qualify the Company for depletion deductions in computing Peruvian taxable income. Following litigation, the Supreme Court in Peru during 1972 issued a decision denying the Company's appeal of this position. Based upon this decision, additional taxes and penalties have been assessed for the years 1957-1969 aggregating approximately \$17.9 million after reduction of approximately \$2 million for prior year's tax overpayments. The Company has made arrangements with the Peruvian Banco de la Nacion for payment of this additional assessment in monthly installments over a ten-year period commencing in October 1972. The obligation for deferred payment is guaranteed by the net assets of the branch.

Marcona believes, based upon advice of counsel, that no loss will be sustained as a result of this additional assessment since its concession agreement provides for indemnification against any such losses. Accordingly, the total liability has not been recorded in the financial statements and installments, as paid, are being recorded as a claim receivable.

(d) Future operations — Marcona Mining Company has commenced negotiations with the Peruvian government to create a Special Mining Enterprise to own the branch's mining and processing assets, with equity interests held 75% by the Company and 25% by Mineroperu. The proposed agreement would provide for payment by Mineroperu for its 25% interest in the form of cash or bonds, the total of which would represent 25% of the fair value of the Peruvian branch assets. It is anticipated that a portion of the consideration received would be applied to the settlement of the unpaid balance of the Peruvian Banco de la Nacion debt. Following execution of the proposed agreement, the Peruvian mining operations would be conducted by the Special Mining Enterprise which would be managed by the Company.

(e) Expansion project — In January 1973, Marcona Mining Company entered into contracts with certain Japanese firms covering the expansion of the iron ore processing facilities. The Japanese firms have also contracted for the purchase of a substantial portion of the output of the new facilities. The total cost of the expansion project, estimated at approximately \$66 million, will be financed by loans from the Japanese firms to be repaid by deductions from payments for iron ore pellets to be produced in the new facilities. The expansion project and the related contracts are subject to the approval of the Peruvian government.



**MARCONA CORPORATION  
AND SUBSIDIARY COMPANIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 4 — Plant and equipment:**

Plant and equipment at December 31, 1972 is summarized below by major classification:

Mine plant and equipment.....	\$172,190,000
Ocean cargo vessels.....	120,525,000
Office furniture and equipment.....	1,235,000
	<u>293,950,000</u>
Less accumulated depreciation.....	121,576,000
	<u>\$172,374,000</u>

The range of the estimated useful lives used in computing depreciation is as follows:

Mine plant and equipment.....	5 to 15 years
Ocean cargo vessels.....	20 years
Office furniture and equipment.....	10 years

**Note 5 — Long-term debt:**

Long-term debt at December 31, 1972 is summarized below:

Notes payable to banks:

7%, renewable to 1975.....	\$ 8,000,000
6%, due 1973.....	18,000,000
6%, \$1,571,000 due annually to 1975.....	3,929,000
6¾%, \$1,250,000 due annually to 1975.....	3,113,000
7½%, \$1,800,000 due annually to 1976.....	6,300,000

Vessel mortgages:

5½%, \$728,000 due annually to 1974.....	1,092,000
6¼%, \$173,000 due annually to 1975.....	433,000
5½%, \$846,000 due annually to 1975.....	2,538,000
5½%, \$1,117,000 due annually to 1977.....	5,589,000
5½%, \$1,114,000 due annually to 1977.....	5,573,000
5½%, \$1,092,000 due annually to 1978.....	6,010,000

Various equipment loans (6¾%).....	466,000
	<u>61,043,000</u>
Less — Current portion.....	9,878,000
	<u>\$51,165,000</u>

Arrangements have been made with the lending banks to renew the \$18,000,000 6% notes due in 1973 to mature in March 1974.

Installments due after 1973 are payable as follows: 1974 — \$27,503,000; 1975 — \$15,566,000; 1976 — \$4,225,000; 1977 — \$3,325,000; thereafter \$546,000.

The 7% and 7½% notes (Eurodollar borrowings) provide for variable interest rates equivalent to the average of the lending banks' best rate and the average of the lending banks' offered rates plus ⅞%, respectively. The 6¾% note provides for a variable interest rate equivalent to the lending bank's prime rate plus 1%.

**MARCONA CORPORATION  
AND SUBSIDIARY COMPANIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 5 — Long-term debt (Continued):**

Certain of the loan agreements contain restrictions relating to working capital and the payment of dividends. The most restrictive limitations require that Marcona maintain working capital equal to \$5,000,000, after excluding the current portion of long-term debt, and that Marcona not pay dividends in excess of 66⅔% of the prior year's consolidated earnings. Accordingly, \$136,831,000 of retained earnings at December 31, 1972, are not available for payment of dividends in 1973.

**Note 6 — Taxes on income:**

Provisions for income taxes are as follows:

	Year ended December 31		
	1970	1971	1972
Federal:			
Current.....	\$ 1,000,000		
Deferred.....	4,240,000	\$ 7,500,000	
State — Current.....	318,000	383,000	\$ 711,000
Foreign:			
Current.....	4,816,000		1,716,000
Deferred.....	884,000	725,000	(104,000)
	<u>\$11,258,000</u>	<u>\$ 8,608,000</u>	<u>\$ 2,323,000</u>

The principal reason for variance from the customary relationship between earnings before tax and income tax expense is that no provision has been made for U. S. income taxes on the undistributed earnings of foreign subsidiaries which are considered to be indefinitely invested.

The Internal Revenue Service has issued a report with respect to its examination of Marcona's income tax returns for the years 1963 through 1967. Such report includes assessments relating to various issues totalling approximately \$2,700,000. Based upon advice of counsel, management believes that Marcona has meritorious defenses against the major portion of the assessments and that any adjustments arising upon ultimate settlement of the issues would not have a significant effect on the financial statements.

**Note 7 — Capital stock:**

Under the certificate of incorporation, voting rights are vested exclusively in the Class A stock. Provided that Class B dividends are not less than specified annual levels, Class C stock shares proportionately with Class B stock in earnings in excess of these specified levels subsequent to December 31, 1968. In the event of liquidation: (a) Class A stockholders are entitled to par value (\$10 per share) plus the amount of any dividends declared and unpaid; (b) Class C stockholders are entitled to par value (\$5 per share) plus the amount of retained earnings (\$527,000 at December 31, 1972, \$445,000 at December 31, 1971 and \$260,000 at December 31, 1970) allocated to Class C stock; and (c) Class B stockholders are entitled to the remaining assets.

**Note 8 — Commitments and contingent liabilities:**

Marcona employs a number of chartered vessels in its ocean transportation business in addition to owned vessels. Such charters vary from single voyages to eleven-year time charters. At December 31, 1972, aggregate commitments for time chartered vessels were \$103,700,000, payable in decreasing

**MARCONA CORPORATION  
AND SUBSIDIARY COMPANIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 8 — Commitments and contingent liabilities (Continued):**

annual amounts to 1982 as follows: 1973 — \$21,700,000; 1974 — \$17,700,000; 1975 — \$14,600,000; 1976 — \$11,600,000; 1977 — \$8,700,000; thereafter \$29,400,000. Additional chartered vessels will be required each year to maintain the present level of operations.

Certain individuals who received royalties based upon the early activity of Marcona Mining Company's operations in Peru have brought legal action against the Company alleging breach of contract and fraud. The Company considers this suit to be substantially without merit and believes that the result of this action will not have a significant effect on the financial statements.

**Note 9 — Accounts payable and accrued expenses:**

Accounts payable and accrued expenses at December 31, 1972 were as follows:

Accounts payable.....	\$ 9,630,000
Accrued expenses.....	3,482,000
	<u>\$13,112,000</u>

**Note 10 — Supplementary profit and loss information:**

	Charged to Costs and Expenses		
	Year ended December 31		
	1970	1971	1972
Maintenance and repairs.....	\$12,296,000	\$14,993,000	\$15,416,000
Depreciation.....	<u>\$13,918,000</u>	<u>\$15,286,000</u>	<u>\$16,820,000</u>
Taxes, other than income taxes:			
Payroll taxes.....	\$ 1,106,000	\$ 1,282,000	\$ 1,422,000
Sales and export taxes.....	2,185,000	1,961,000	1,876,000
Other taxes and licenses.....	441,000	274,000	427,000
	<u>\$ 3,732,000</u>	<u>\$ 3,517,000</u>	<u>\$ 3,725,000</u>
Rents.....	\$45,950,000 (a)	\$45,863,000 (a)	\$34,170,000 (a)
Royalties.....	<u>\$ 9,003,000</u>	<u>\$ 8,148,000</u>	<u>\$ 8,484,000</u>

(a) Consists principally of "charter hire" on vessels chartered on a voyage and time charter basis.

## **REPORT OF INDEPENDENT ACCOUNTANTS**

To the Board of Directors and Stockholders of  
Bagdad Copper Corporation

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of changes in stockholders' equity and of changes in financial position, together with the consolidated statement of income appearing elsewhere in this Proxy Statement, present fairly the financial position of Bagdad Copper Corporation and its subsidiaries at December 31, 1971 and 1972, the results of their operations for the five years then ended and the changes in financial position for the three years then ended, in conformity with generally accepted accounting principles consistently applied. Our examinations of these statements were 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 & CO.

Phoenix, Arizona  
February 16, 1973

**BAGDAD COPPER CORPORATION**  
**CONSOLIDATED BALANCE SHEETS**

A S S E T S

	December 31	
	1971	1972
	(Stated in thousands of dollars)	
<b>CURRENT ASSETS:</b>		
Cash (including \$6,500,000 in certificates of deposit in 1972).....	\$ 3,182	\$ 8,186
Accounts receivable, less allowance for doubtful accounts of \$155,000 in 1971 and \$166,000 in 1972.....	4,144	5,498
Inventories (Notes 1 and 2).....	4,639	2,469
Supplies (Note 1).....	2,322	2,138
Prepaid expenses.....	105	94
Total current assets.....	<u>14,392</u>	<u>18,385</u>
<b>PROPERTY, PLANT AND EQUIPMENT, net (Notes 1 and 3):</b>		
Buildings, machinery and equipment, less accumulated depreciation.....	15,275	15,535
Mining properties and land, less accumulated depletion.....	752	1,605
	<u>16,027</u>	<u>17,140</u>
<b>OTHER ASSETS:</b>		
Note receivable.....	250	250
Cash surrender value of life insurance.....	335	370
Deferred charges and other assets.....	315	255
Excess cost of stock of subsidiaries over book value of assets acquired.....	662	662
	<u>1,562</u>	<u>1,537</u>
	<u><u>\$31,981</u></u>	<u><u>\$37,062</u></u>
 <b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
<b>CURRENT LIABILITIES:</b>		
Trade accounts payable.....	\$ 1,166	\$ 1,330
Dividends payable.....	151	161
Estimated income taxes.....	177	1,572
Taxes other than income taxes.....	594	736
Accrued expenses.....	507	500
Total current liabilities.....	<u>2,595</u>	<u>4,299</u>
<b>LONG-TERM DEBT</b> .....		<u>117</u>
<b>DEFERRED INCOME TAXES (Note 1)</b> .....	<u>589</u>	<u>603</u>
<b>STOCKHOLDERS' EQUITY, per accompanying statements (Note 4):</b>		
Capital stock — authorized 4,800,000 shares of \$2.50 par value — 1,506,380 and 1,608,506 shares outstanding, respectively.....	3,766	4,021
Other paid-in capital.....	6,630	9,426
Retained earnings.....	18,401	18,596
	<u>28,797</u>	<u>32,043</u>
<b>CONTINGENCIES (Note 7)</b>		
	<u><u>\$31,981</u></u>	<u><u>\$37,062</u></u>

**BAGDAD COPPER CORPORATION**  
**CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY**  
**Five Years Ended December 31, 1972**

	Capital stock		Other paid-in capital	Retained earnings
	Number of shares	Amount		
	(Stated in thousands of dollars)			
BALANCE, JANUARY 1, 1968.....	1,266,373	\$3,166	\$1,855	\$12,505
5% stock dividend.....	63,852	160	1,341	(1,501)
Cash for fractional shares.....				(12)
Cash dividends.....				(288)
Stock options exercised.....	21,140	52	37	
Net income for the year.....				3,398
BALANCE, DECEMBER 31, 1968.....	1,351,365	3,378	3,233	14,102
Cash dividends.....				(676)
Stock options exercised.....	350	1	4	
Net income for the year.....				3,156
BALANCE, DECEMBER 31, 1969.....	1,351,715	3,379	3,237	16,582
6% stock dividend.....	80,449	201	1,508	(1,709)
Cash for fractional shares.....				(16)
Cash dividends.....				(549)
Stock options exercised.....	2,180	6	26	
Net income for the year.....				4,837
BALANCE, DECEMBER 31, 1970.....	1,434,344	3,586	4,771	19,145
5% stock dividend.....	71,110	178	1,849	(2,027)
Cash for fractional shares.....				(17)
Cash dividends.....				(581)
Stock options exercised.....	926	2	10	
Net income for the year.....				1,881
BALANCE, DECEMBER 31, 1971.....	1,506,380	3,766	6,630	18,401
6% stock dividend.....	90,282	226	2,663	(2,889)
Cash for fractional shares.....				(24)
Cash dividends.....				(609)
Stock options exercised.....	11,844	29	133	
Net income for the year.....				3,717
BALANCE, DECEMBER 31, 1972.....	1,608,506	\$4,021	\$9,426	\$18,596

# BAGDAD COPPER CORPORATION

## CONSOLIDATED STATEMENTS OF CHANGES IN FINANCIAL POSITION

	Year ended December 31		
	1970	1971	1972
	(Stated in thousands of dollars)		
FINANCIAL RESOURCES WERE PROVIDED BY:			
Net income.....	\$ 4,837	\$1,881	\$3,717
Add income charges not affecting working capital —			
Depreciation and amortization.....	1,732	2,029	1,848
Deferred income taxes.....	61	655	24
Joint venture loss.....	14		
Reductions of deferred charges.....	238	131	113
Losses on dispositions of property, plant and equipment...	31	157	139
Investment and advances charged to income.....	96	1,676	
Working capital provided by operations.....	7,009	6,529	5,841
Return of funds from escrow established for acquisition of subsidiary.....		221	
Sales of common stock.....	31	12	162
Term loan.....	130		120
Liquidation of joint ventures.....	1,543		
Proceeds from terminated life insurance policies.....		66	
	<u>8,713</u>	<u>6,828</u>	<u>6,123</u>
FINANCIAL RESOURCES WERE USED FOR:			
Acquisitions of property, plant and equipment (including \$1,410,000 in 1970 received on liquidation of joint ventures).....	7,808	2,247	3,036
Investment in and advances to Hurricane Car Wash Systems, Inc.....	1,246	526	
Purchase of note receivable.....	250		
Cash dividends and cash for fractional shares.....	565	598	633
Increase in cash surrender value of life insurance policies.....	48	45	35
Repayment of term loan.....		130	3
Other.....	239	79	127
	<u>10,156</u>	<u>3,626</u>	<u>3,834</u>
INCREASE (DECREASE) IN WORKING CAPITAL			
(Note 6).....	<u>\$(1,443)</u>	<u>\$3,202</u>	<u>\$2,289</u>

## BAGDAD COPPER CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### **Note 1 — Summary of significant accounting policies:**

The following accounting principles and practices of the Company are set forth below to facilitate the understanding of information presented in the financial statements.

##### *Principles of consolidation —*

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, Garland Steel Company, Bagdad Plastics Company and Braham Industries, Inc. after elimination of material inter-company investments, balances, transactions and profits.

##### *Inventories —*

Copper and supplies inventories are generally stated at average costs while steel and plastic materials are stated at first-in first-out cost. None are in excess of current market values. By-products are carried at market.

##### *Property, plant and equipment —*

Property, plant and equipment are carried at cost. Depreciation lives generally follow Internal Revenue Service guidelines, using generally the straight-line method, however some accelerated rates are also used for financial reporting purposes. The carrying value of assets retired and the related accumulated depreciation are cleared from the respective accounts and the net difference, less any amount realized from disposition, is reflected in earnings.

Maintenance and repairs are charged to income as incurred and renewals and betterments are capitalized.

##### *Mining properties —*

Mining properties, except those not yet developed, are considered to be fully depleted, thus no depletion has been provided in the accounts.

##### *Mining expenses —*

Mine exploration and development expenses are charged against earnings as incurred. Prior to 1967, mine development costs were handled differently as set forth in Note A of Notes to Bagdad's Consolidated Statement of Income included elsewhere in this Proxy Statement.

##### *Pension costs —*

The Company's policy is to fund pension costs accrued. Prior service costs are amortized over a 30-year period. Prior to 1972, these costs were amortized over a 10-year period. This change in amortization policy had no material effect on net income.

##### *Income taxes —*

Certain charges to earnings in the financial statements differ in amount from those deducted in tax returns. The differences are attributable principally to the use of accelerated methods of depreciation, computing depletion on a statutory basis, amortizing patents over different lives for tax than book purposes and tax benefits of the write-off of investments and advances in subsidiaries not given effect in book earnings. The accumulative tax effect of timing differences is provided for as deferred income taxes in the financial statements.

Investment tax credits are accounted for using the flow-through method.



# BAGDAD COPPER CORPORATION

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

### Note 2 — Inventories:

	December 31			
	1971		1972	
	Pounds	Amount	Pounds	Amount
	(000 omitted)			
Copper products:				
Copper concentrates.....	4,268	\$ 880	272	\$ 51
Copper precipitates.....	30	13	45	18
Copper powder —				
In process.....	636	257	257	95
Finished.....	1,657	1,032	243	164
Cathodes.....	3,967	382	1,058	146
Molybdenum concentrates.....	60	52	43	57
	<u>10,618</u>	<u>2,616</u>	<u>1,918</u>	<u>531</u>
Steel products:				
Raw materials.....		654		939
Work in process.....		419		169
Finished goods.....		292		292
Car wash parts and equipment.....		549		416
Plastic products:				
Raw materials.....		12		23
Work in process.....		97		99
		<u>\$4,639</u>		<u>\$2,469</u>

Inventories used in the computation of consolidated cost of sales amounted to \$1,727,000 at December 31, 1969, \$2,903,000 at December 31, 1970, \$4,639,000 at December 31, 1971 and \$2,469,000 at December 31, 1972.

### Note 3 — Property, plant and equipment:

	December 31	
	1971	1972
	(Stated in thousands of dollars)	
Buildings.....	\$ 3,496	\$ 3,850
Machinery and equipment.....	20,495	21,805
Land improvements.....	2,477	2,744
Mining properties and land.....	2,066	2,919
	<u>28,534</u>	<u>31,318</u>
Less allowances for depreciation and depletion.....	<u>12,507</u>	<u>14,178</u>
	<u>\$16,027</u>	<u>\$17,140</u>

### Note 4 — Stock options:

Bagdad, under two stock option plans, has reserved 99,892 shares (adjusted for stock dividends) of its common stock for issuance to key employees with terms not to exceed five years and at option prices not less than 100% of fair market value at the date of grant. Options are first exercisable 33% during the second year after the grant and cumulatively 33% in each subsequent year. Options

# BAGDAD COPPER CORPORATION

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

### Note 4 — Stock options (Continued):

available for grant at December 31, 1971 and 1972 were 14,946 and 9,215 (adjusted for stock dividends), respectively. Bagdad makes no charge to income in connection with the sale of stock under option. Any proceeds to Bagdad from premature disposition of shares by employees will be credited to other paid-in capital. Information regarding stock options at December 31, 1972 and becoming exercisable and exercised during the five years then ended is presented below:

Year of grant	Options outstanding December 31, 1972		
	Shares(a)	Per share(a)	Total
1969.....	9,424	\$17.55	\$165,000
1970.....	589	17.27	10,000
1971.....	556	19.76	11,000
1972.....	5,695	32.63-36.56	206,000
	<u>16,264</u>		<u>\$392,000</u>

Options became exercisable as follows:

Year of grant	Date exercisable	Shares (a)	Option price		Market value at date exercisable	
			Per share(a)	Total	Per share(a)	Total
1967.....	1968	4,747	\$11.81	\$ 56,000	\$17.45	\$ 83,000
1967.....	1969	4,747	11.81	56,000	21.41	102,000
1967-1969.....	1970	9,228	11.81-20.76	137,000	18.31-24.59	194,000
1969-1970.....	1971	4,293	17.27-17.55	75,000	26.16-28.20	112,000
1969-1971.....	1972	4,044	17.27-19.76	72,000	27.48-41.63	164,000
		<u>27,059</u>		<u>\$396,000</u>		<u>\$655,000</u>

Options were exercised as follows:

Year	Year of grant	Shares(a)	Option price		Market value at date of exercise	
			Per share(a)	Total	Per share(a)	Total
1968.....	1963	24,940	\$ 3.62	\$ 90,000	\$13.61-\$18.96	\$396,000
1969.....	1967	413	11.81	5,000	16.95	7,000
1970.....	1967-1969	2,571	11.81-17.55	31,000	19.32-24.25	52,000
1971.....	1967	1,030	11.81	12,000	19.76-19.89	20,000
1972.....	1967-1971	12,449	11.81-19.76	162,000	30.42-41.75	470,000
		<u>41,403</u>		<u>\$300,000</u>		<u>\$945,000</u>

(a) Adjusted for 5%, 6%, 5% and 6% stock dividends in 1968, 1970, 1971 and 1972, respectively.

### Note 5 — Retirement and profit sharing plans:

Retirement benefits for all eligible mine employees are provided under an employer funded plan. Unfunded past service costs at December 31, 1972 were \$2,566,000. Bagdad's pension costs for the three years ended December 31, 1972 were \$214,000, \$276,000 and \$416,000, respectively. The actuarially computed value of employees' vested benefits under the plan exceeded the pension fund by approximately \$396,000 at December 31, 1972.

## BAGDAD COPPER CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

#### Note 5 — Retirement and profit sharing plans (Continued):

Garland Steel Company contributes to a trustee employer-employee funded savings and profit sharing plan up to 12½% of its net income before income taxes. Garland's contributions for the three years ended December 31, 1972 were \$112,000, \$69,000 and \$83,000, respectively.

#### Note 6 — Changes in components of working capital:

	Year ended December 31		
	1970	1971	1972
	(Stated in thousands of dollars)		
Cash.....	(\$2,767)	\$ 180	\$5,004
Accounts receivable.....	91	181	1,354
Inventories.....	1,177	1,735	(2,170)
Supplies.....	726	164	(184)
Prepaid expenses.....	32	(35)	(11)
	<u>(741)</u>	<u>2,225</u>	<u>3,993</u>
Trade accounts payable.....	77	11	(164)
Dividends payable.....	(8)	(7)	(10)
Estimated income taxes.....	(746)	1,010	(1,395)
Taxes other than income taxes.....	(34)	(37)	(142)
Accrued expenses.....			7
Notes payable.....	9		
	<u>(702)</u>	<u>977</u>	<u>(1,704)</u>
Increase (decrease) in working capital.....	<u>(\$1,443)</u>	<u>\$3,202</u>	<u>\$2,289</u>

#### Note 7 — Contingencies:

Bagdad has been assessed additional income taxes by the Internal Revenue Service for the years 1967 through 1970 in the amount of some \$830,000. The deficiency results from the proposed treatment by the Internal Revenue Service to amortize over an arbitrary period certain costs incurred in Bagdad's leaching operations rather than to deduct such costs as incurred. A "protest" of the examining agent's report has been filed with the Internal Revenue Service and Bagdad will vigorously assert its position, which is in accordance with long standing industry practice, through the administrative proceedings of the Internal Revenue Service and, if necessary, by litigation. At the present time it is not possible to estimate the effect that the final resolution of this matter will have on Bagdad; however, based upon the merits of the company's position it is the opinion of management that the resolution of this matter will not have a significant adverse effect on Bagdad's operations.

In January 1973 Bagdad reached an agreement with Cyprus Mines Corporation whereby Cyprus will exchange 1.2 shares of its stock for each share of Bagdad's capital stock. The merger is being structured to qualify for pooling of interests accounting and is subject to stockholder approval of both companies.

# BAGDAD COPPER CORPORATION

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

### Note 8 — Supplementary income statement information:

	Year ended December 31		
	1970	1971	1972
	(Stated in thousands of dollars)		
Maintenance and repairs.....	\$2,202	\$2,530	\$3,084
Depreciation, depletion and amortization of property, plant and equipment.....	\$1,261	\$1,677	\$1,784
Depreciation and amortization of intangible assets.....	\$ 471	\$ 352	\$ 64
Taxes other than income:			
Real and personal property.....	\$ 703	\$ 789	\$ 902
Production.....	325	373	467
Payroll.....	212	417	450
Other.....	4	4	76
	\$1,244	\$1,583	\$1,895
Rents.....	\$ 8	\$ 22	\$ 66
Royalties.....	\$ 31	\$ 32	\$ 59
Advertising costs.....			\$ 90
Research and development costs.....			\$ 147

**AGREEMENT OF MERGER**

THIS AGREEMENT OF MERGER, dated February 21, 1973, by and between CYPRUS MINES CORPORATION, a New York corporation (herein sometimes called "Cyprus"), and the Directors (or a majority thereof) of BAGDAD COPPER CORPORATION, an Arizona corporation (herein sometimes called "Bagdad"), (said corporations herein sometimes collectively referred to as the "Constituent Corporations");

**WITNESSETH:**

WHEREAS, Cyprus is a corporation duly organized and existing under the laws of the State of New York, having been incorporated on March 11, 1916, and Bagdad is a corporation duly organized and existing under the laws of the State of Arizona, having been incorporated in Delaware on March 1, 1927, and reincorporated in Arizona by merger as of April 19, 1967 into an Arizona corporation previously formed under the name of BCC Corporation, which name reverted, upon consummation of the merger, to Bagdad Copper Corporation; and

WHEREAS, as of February 14, 1973 the authorized capital stock of Cyprus consisted of 1,000,000 Preferred Shares, par value \$4.00 per share, none of which shares were issued, and 28,000,000 Common Shares, par value \$4.00 per share, of which 8,781,600 were issued and outstanding; and

WHEREAS, as of January 31, 1973 the authorized capital stock of Bagdad consisted of 4,800,000 shares, par value \$2.50 per share, of which 1,610,162 were issued; and

WHEREAS, the Board of Directors of the Constituent Corporations deem it advisable and in the best interests of the Constituent Corporations and their shareholders that the Constituent Corporations be consolidated by the merger of Bagdad into Cyprus pursuant to the applicable laws of the States of Arizona and New York;

NOW, THEREFORE, by reason of the premises and in consideration of the mutual covenants herein contained, it is agreed as follows:

**ARTICLE I**

The Constituent Corporations shall be merged into a single corporation, to wit: CYPRUS MINES CORPORATION, one of the Constituent Corporations, which is not a new corporation and which shall continue its corporate existence and be the corporation surviving the merger (said corporation being herein sometimes referred to as the Surviving Corporation). The terms and conditions of the merger and the mode of carrying them into effect are set forth in this Agreement.

**ARTICLE II**

On the effective date of the merger the separate corporate existence of Bagdad shall cease and the Surviving Corporation shall (i) become the owner without other transfer of all the rights and properties of the Constituent Corporations and (ii) become subject to all the debts and liabilities of the Constituent Corporations to the same extent as if the Surviving Corporation had itself incurred them. Thereupon the separate existence of Bagdad shall cease.

**ARTICLE III**

The effective date of the merger shall be the last day of the calendar month in which the certificate of merger is filed by the Department of State of the State of New York following compliance with all filing requirements of the State of Arizona pertaining to the effectiveness of the merger.

#### ARTICLE IV

The Articles of Incorporation of the Surviving Corporation shall be the same as those of Cyprus and on the effective date of the merger shall read in full as follows:

FIRST: The name of the corporation is CYPRUS MINES CORPORATION.

SECOND: The purposes for which this corporation is formed are to do any or all of the following to the same extent as natural persons might do:

(1) To acquire, operate or deal in or with real and personal property of any type in the United States of America or any foreign country, state or possession.

(2) To maintain and operate structures, equipment and transportation, transmission and other facilities.

(3) To acquire a foreign domicile and to be registered or recognized in the Republic of Cyprus or in any other foreign country, state or possession.

(4) To act as agent or factor for any person, firm or corporation.

(5) To engage in the mining business in any or all of its branches.

(6) To engage in any and all businesses involving exploration for or exploitation, processing or marketing of natural resources of any type.

(7) To engage in the construction business in any or all of its branches.

(8) To engage in the private transportation business in any or all of its branches.

(9) To engage in any form of mercantile, manufacturing or trading businesses.

(10) To engage in all forms of experimentation, research and development.

None of the purposes above stated shall be construed to include any business or purpose for which the formation of a corporation is permitted under any statute of the State of New York other than its Business Corporation Law unless such statute permits the formation of a corporation under said Business Corporation Law.

THIRD: The powers of this corporation shall be those conferred by the laws of the State of New York.

FOURTH: The aggregate number of shares which the corporation shall have authority to issue is Twenty-Nine Million (29,000,000) shares of the par value of Four Dollars (\$4.00) each. The authorized shares shall be divided into two classes, consisting of Twenty-Eight Million (28,000,000) shares of a class designated "Common Stock" of the par value of Four Dollars (\$4.00) per share and One Million (1,000,000) shares of a class designated "Preferred Stock" of the par value of Four Dollars (\$4.00) per share.

The designations of each class and the relative rights, preferences and limitations of the shares of each class, and the authority of the Board of Directors to establish and designate series of the Preferred Stock and to fix the variations in the relative rights, preferences, and limitations as between series of the Preferred Stock, are as follows:

1. The Preferred Stock may be issued in one or more series, from time to time, with each such series to have such designation, powers, preferences and relative, participating, optional or other special rights, and qualifications, limitations or restrictions thereof, as shall be stated and expressed in the resolution or resolutions providing for the issue of such series adopted by

the Board of Directors of the Corporation, subject to (i) the limitations prescribed by law and in accordance with the provisions hereof, and (ii) the further limitation that if the stated dividends and amounts payable in liquidation are not paid in full, the shares of all series of preferred shares shall share ratably in the payment of dividends including accumulations, if any, in accordance with the sums which would be payable on such shares if all dividends were declared and paid in full, and in any distribution of assets other than by way of dividends in accordance with the sums which would be payable on such distribution if all sums payable were discharged in full. For the foregoing purposes the Board of Directors is hereby expressly vested with authority to adopt any such resolution or resolutions and to cause the execution of any certificate required by law and to file the same in the office of the Department of State of the State of New York. The authority of the Board of Directors with respect to each such series shall include, but not be limited to, the determination or fixing of the following:

(i) The designation and number of shares comprising such series, which number may (except where otherwise provided by the Board of Directors in creating such series) be increased or decreased (but not below the number of shares then outstanding) from time to time by like action of the Board of Directors;

(ii) The dividend rate of such series, the conditions and times upon which such dividends shall be payable, the relation which such dividends shall bear to the dividends payable on any other class or classes of stock or series thereof, or any other series of the same class, and whether dividends shall be cumulative or non-cumulative;

(iii) The conditions upon which the shares of such series shall be subject to redemption by the Corporation and the times, prices and other terms and provisions upon which the shares of the series may be redeemed;

(iv) Whether or not the shares of the series shall be subject to the operation of a retirement or sinking fund to be applied to the purchase or redemption of such shares and, if such retirement or sinking fund be established, the annual amount thereof and the terms and provisions relative to the operation thereof;

(v) Whether or not the shares of the series shall be convertible into or exchangeable for shares of any other class or classes, with or without par value, or of any other series of the same class, and, if provision is made for conversion or exchange, the times, prices, rates, adjustments, and other terms and conditions of such conversion or exchange;

(vi) Whether or not the shares of the series shall have voting rights, in addition to the voting rights provided by law, and, if so, subject to the limitation hereinafter set forth, the terms of such voting rights;

(vii) The rights of the shares of the series in the event of voluntary or involuntary liquidation, dissolution, or upon the distribution of assets of the Corporation;

(viii) Any other powers, preferences and relative, participating, optional or other special rights, and qualifications, limitations or restrictions thereof, of the shares of such series, as the Board of Directors may deem advisable and as shall not be inconsistent with the provisions of this Certificate of Incorporation.

2. The holders of shares of the Preferred Stock of each series shall be entitled to receive, when and as declared by the Board of Directors, out of funds legally available for the payment of dividends, dividends at the rates fixed by the Board of Directors for such series, and no more, before any dividends, other than dividends payable in Common Stock, shall be declared and paid, or set apart for payment, on the Common Stock with respect to the same dividend period.

3. Whenever, at any time, dividends on the then outstanding Preferred Stock as may be required with respect to any series outstanding shall have been paid or declared and set apart for payment on the then outstanding Preferred Stock, and after complying with respect to any retirement or sinking fund or funds for any series of Preferred Stock, the Board of Directors may, subject to the provisions of the resolution or resolutions creating any series of Preferred Stock, declare and pay dividends on the Common Stock, and the holders of shares of the Preferred Stock shall not be entitled to share therein.

4. The holders of shares of the Preferred Stock of each series shall be entitled upon liquidation or dissolution or upon the distribution of the assets of the Corporation to such preferences as provided in the resolution or resolutions creating such series of Preferred Stock, and no more, before any distribution of the assets of the Corporation shall be made to the holders of shares of the Common Stock. Whenever the holders of shares of the Preferred Stock shall have been paid the full amounts to which they shall be entitled, the holders of shares of the Common Stock shall be entitled to share ratably in all assets of the Corporation remaining.

5. At all meetings of the stockholders of the Corporation, the holders of shares of the Common Stock shall be entitled to one vote for each share of Common Stock held by them. Except as otherwise provided by a resolution or resolutions of the Board of Directors creating any series of Preferred Stock or by the laws of the State of New York, the holders of shares of the Common Stock issued and outstanding shall have and possess the exclusive right to notice of stockholders' meetings and the exclusive power to vote. The holders of shares of the Preferred Stock issued and outstanding shall, in no event, be entitled to more than one vote for each share of Preferred Stock held by them unless otherwise required by law.

6. Whenever and as often as dividends on the Preferred Stock in an amount equal to or exceeding the equivalent of six quarterly dividends upon such shares at the rate or rates fixed at the time of the original authorization of the issue of shares of the respective series shall not be paid, the holders of the outstanding Preferred Stock of all series, voting separately as a class, each share entitling the holder thereof to one vote, shall be entitled at the next succeeding annual meeting of shareholders to elect a number of directors (adjusted, in the event of a fraction, to the next highest whole number) equal to  $1/10$  of the number of directors constituting the Board of Directors at the time of the meeting, but in no event less than two directors and the holders of the Common Stock or each share entitling the holder thereof to one vote, shall be entitled to elect the remaining directors of the Corporation, such election by the holders of the Common Stock to be held before such election by the holders of the Preferred Stock. If and when all dividends accrued and unpaid on the outstanding Preferred Stock of all series having cumulative dividends shall have been paid or declared and provided for and the full dividend on the outstanding Preferred Stock of all series having cumulative dividends for the then current quarterly dividend period shall have been paid or declared and provided for, or, if dividends on any series of Preferred Stock shall not be cumulative, if and when such dividends shall have been paid regularly for one year or declared and provided for, the holders of the Preferred Stock shall, at the next succeeding annual meeting of the shareholders, be divested of their rights in respect of the election of directors provided in this paragraph 6, and the voting rights shall revert to the status existing prior to the first dividend payment date on which dividends on the outstanding Preferred Stock were not paid in full.

At all meetings of shareholders at which holders of the outstanding Preferred Stock are entitled to elect directors in the exercise of rights provided in this paragraph 6, the holders of record of  $33\frac{1}{3}\%$  of the outstanding Preferred Stock shall be sufficient to constitute a quorum for the election of such directors. In case any vacancy shall occur among the directors elected by the holders of Preferred Stock pursuant to this paragraph 6, such vacancy may be filled for the unexpired portion of the term by vote of the remaining director or by a majority vote of the remaining



directors theretofore elected by the holders of Preferred Stock, or by his successor or their successors in office, or, if there shall be no such remaining director, by the vote of the holders of the outstanding Preferred Stock given at a special meeting of such holders called for the purpose. Any director who shall have been elected by the holders of the Preferred Stock or by the remaining director or directors so elected as herein contemplated or by the successor or successors to such remaining director or directors, may be removed at any time, either for or without cause, by, but only by, the affirmative votes of the holders of record of a majority of the outstanding Preferred Stock, given at a special meeting of such holders called for the purpose, and any vacancy thereby created may be filled at such meeting, provided the holders of the Preferred Stock shall then be entitled to elect directors as aforesaid.

7. So long as any shares of Preferred Stock are outstanding, the affirmative consent of the holders of at least two-thirds of the Preferred Stock of all series at the time outstanding, given either in writing or by vote at a meeting duly called for that purpose at which the holders of the Preferred Stock shall vote separately as a class, shall be necessary for effecting or validating any one or more of the following:

(i) Any increase in the authorized number of shares of Preferred Stock, or the authorization or creation of any additional class of shares ranking prior to or on a parity with the Preferred Stock or any increase in the authorized amount of any such additional class of shares ranking prior to or on a parity with the Preferred Stock, or the authorization or creation of any class of shares or obligation convertible into or evidencing the right to purchase any shares of any class ranking prior to or on a parity with the Preferred Stock.

(ii) Any amendment, alteration or repeal of any of the provisions hereof, which affects adversely the Preferred Stock or of any of the rights, preferences, privileges or powers of outstanding shares of Preferred Stock or the restrictions or qualifications thereof; provided, however, that if any such amendment, alteration or repeal would affect adversely the rights, preferences, privileges or powers of outstanding shares of Preferred Stock of any particular series, without equally so affecting the rights, preferences, privileges or powers of the outstanding shares of all series, then like consent by the holders of at least two-thirds of the shares of that particular series at the time outstanding shall also be necessary for affecting or validating any such amendment, alteration or repeal.

FIFTH: The office of the corporation in the State of New York is to be located in the Borough of Manhattan, City and County of New York, State of New York, but the corporation shall have power to conduct its business in all its branches, or any part thereof, in any part of the world.

SIXTH: The duration of the corporation is to be perpetual.

SEVENTH: The business of the corporation shall be managed by its Board of Directors, each of whom shall be at least twenty-one years of age. The number of directors constituting the entire Board shall not be less than three and subject to such minimum may be increased or decreased from time to time by amendment of the by-laws in a manner not prohibited by law.

Any or all directors may be removed for cause by vote of the shareholders.

Newly created directorships resulting from an increase in the number of directors and vacancies occurring in the Board of Directors for any reason may be filled by vote of a majority of the directors then in office although less than a quorum are in office.

A majority of the entire Board of Directors shall constitute a quorum for the transaction of business except that the by-laws may fix the quorum at less than a majority of the entire Board but not less than one-third thereof.

The Board of Directors, by vote of a majority of the entire board, may appoint from the directors such committees, consisting of three or more directors each, as they may deem judicious, and to such extent as is permitted by law may delegate to such committees all or any of the powers of the Board of Directors.

The Board of Directors may adopt by-laws and from time to time may amend or repeal any by-laws — including those adopted by the shareholders or incorporators — but any by-laws adopted by the Board of Directors may be amended or repealed by the shareholders.

EIGHTH: The private property of the shareholders shall not be subject to the payment of the corporate debts except as required by the laws of the State of New York. The shareholders of the corporation shall have no preemptive rights with reference to any securities issued by this corporation.

NINTH: The Secretary of State of the State of New York has been and is hereby designated as the agent of the corporation upon whom process in any action or proceeding against it may be served within the State of New York.

TENTH: The address to which the Secretary of State shall mail a copy of any process against the corporation which may be served upon him pursuant to law is 277 Park Avenue, New York, New York 10017.

#### ARTICLE V

The By-Laws of Cyprus as they read on the effective date shall be the By-Laws of the Surviving Corporation until amended or repealed or until new By-Laws shall be adopted.

#### ARTICLE VI

The directors and officers of Cyprus on the effective date shall be the directors and officers of the Surviving Corporation immediately following the merger. Cyprus management's nominees for election as directors are the following and it is anticipated that the following persons will be the directors of the Surviving Corporation immediately following the merger. Their names and residence addresses (all in California) are as follows:

Paul W. Allen  
1175 Glen Oaks Blvd.  
Pasadena 91105  
Luther C. Anderson  
12837 Highwood Street  
Los Angeles 90049  
J. L. Atwood  
5625 Sumner Way  
Apartment 211  
Culver City 90230  
Asa V. Call  
609 Mountain Drive  
Beverly Hills 90210  
Gerald G. Kelly  
1165 Glen Oaks Blvd.  
Pasadena 91105  
Frank L. King  
10375 Wilshire Blvd.  
Los Angeles 90024  
Kenneth Lieber  
148 Via Waziers  
Newport Beach 92660

Henry T. Mudd  
420 Club View Drive  
Los Angeles 90024  
Seeley W. Mudd, II, M.D.  
Glen Deven Coast Route  
Number One  
Monterey  
Donlin P. Murdy  
855 Old Mill Road  
Pasadena 91108  
H. Safford Nye  
1275 Oak Grove Avenue  
San Marino 91108  
Norman F. Sprague, Jr., M.D.  
550 S. Mapleton Drive  
Los Angeles 90024  
Charles B. Thornton  
320 Carolwood Drive  
Los Angeles 90024  
Maynard J. Toll  
414 S. Irving Blvd.  
Los Angeles 90020

If prior to the effective date of the merger, any one or more of the persons named above shall die or refuse or become unable to serve, the other named persons shall be directors of the Surviving Corporation until such effective date. Any vacancy among the membership of the board of directors may be filled as specified in the By-Laws of the Surviving Corporation.

At the first meeting of the Board of Directors of the Surviving Corporation following the effective date of the merger, each of the above-named persons has agreed for himself that he will vote in favor of a resolution to increase the membership of the Board of Directors of the Surviving Corporation by two and to designate David C. Lincoln and Frank L. Snell as additional Directors of the Surviving Corporation.

The following are the names and titles of the persons who are presently the officers of Cyprus and who it is anticipated will be the officers of the Surviving Corporation:

Henry T. Mudd  
Chairman of the Board  
and Chief Executive Officer

Kenneth Lieber  
President

Donlin P. Murdy  
Executive Vice President

Paul W. Allen  
Executive Vice President

Joseph M. Klein  
Executive Vice President

James G. Hansen  
Senior Vice President

Eugene S. Allen  
Vice President

Richard R. Grantham  
Vice President and Treasurer

William E. Hosken  
Vice President

P. J. McLean  
Vice President and Comptroller

William J. Rundle  
Vice President

Robert E. Thurmond  
Vice President

Gerald G. Kelly  
Secretary and General Counsel

Larry S. Hoke  
Assistant Secretary

T. Richard Leidig  
Assistant Secretary

Alma J. Ryan  
Assistant Secretary

## ARTICLE VII

The terms and conditions of the merger, the mode of effectuating them and the manner of converting shares of the Constituent Corporations into shares of the Surviving Corporation are as follows:

(1) On the effective date of the merger:

(a) All of the rights, powers, privileges, franchises, immunities and interests of each of the Constituent Corporations, all property of every nature and description and all things in action belonging to each of the Constituent Corporations shall be deemed transferred to the Surviving Corporation without further action as effectually as they were vested in the respective Constituent Corporations; all claims (including without limitation all tax and other claims against the United States or other taxing authorities) shall be as effectually the property of the Surviving Corporation as they were of the Constituent Corporations; and all rights of creditors and all liens upon the property of either of the Constituent Corporations shall be preserved unimpaired and all obligations and liabilities of the Constituent Corporations shall hereafter attach to the Surviving Corporation and may be enforced against it to the same extent as if they had been incurred or contracted by it;

(b) Except as otherwise specifically stated herein the identity, existence, purposes, powers, franchises, rights and immunities of Cyprus shall continue unaffected by the Merger; and

(c) The assets and liabilities of the Constituent Corporations shall be taken up or continued on the books of Cyprus in the amounts at which they respectively shall be carried at the effective date of the merger on the books of the Constituent Corporations.

(2) None of the employee benefit plans of Bagdad or its subsidiaries shall be terminated by the merger. All present employees of Bagdad will become employees of Cyprus on the effective date of the merger. At or soon thereafter Cyprus shall adopt the Bagdad employee benefit plans or comparable benefit plans which will equal as near as possible the total benefit plans presently available to Bagdad employees. If he is available and willing to serve, the initial President of the Bagdad Copper Division of Cyprus shall be David C. Lincoln, who shall administer the operating personnel, labor relations and administrative functions of the Division under the direction of the Cyprus President.

(3) The Surviving Corporation shall substitute for stock options granted under any stock option plan of Bagdad options to purchase shares of the Surviving Corporation in lieu of shares of Bagdad on a basis which will — upon compliance with applicable provisions of the Internal Revenue Code — at the close of business on the effective date of the merger be as favorable to the holder of each option as his option with respect to Bagdad shares.

(4) Each of the capital shares of Bagdad outstanding at the time the merger becomes effective shall be converted into and become 1.2 Cyprus Common shares; and each shareholder of Bagdad upon surrender to Cyprus for cancellation of one or more certificates for capital stock of Bagdad shall be entitled to receive one or more stock certificates evidencing the number of full Common shares of Cyprus into which the capital stock of Bagdad so surrendered shall have been converted. For fractional shares the procedure specified in subsection (9) below shall be followed.

(5) Each of the authorized Preferred shares and Common shares of Cyprus at the time the merger becomes effective shall not be converted as a result of the merger but all such shares (including any held in the treasury) shall remain authorized Preferred or Common shares of Cyprus.

(6) No shares of Cyprus shall be issued for any shares of Bagdad's capital stock held in its treasury and upon consummation of the merger any such treasury shares and the certificates evidencing them shall be deemed cancelled.

(7) As soon as practicable after the merger becomes effective the certificates evidencing the outstanding capital stock of Bagdad shall be surrendered to Cyprus or its agent for cancellation. Until so surrendered each such certificate nominally evidencing capital stock of Bagdad shall be deemed to evidence the ownership of the number of Cyprus Common shares which the holder thereof would be entitled to receive upon the surrender of such certificate to Cyprus; provided, however, that from the effective date of the merger, and until the surrender of the outstanding certificate for capital stock of Bagdad as hereinabove provided, dividends declared in respect of the full Cyprus Common shares to be exchanged therefor upon such surrender, if any, shall not be paid to such holder but shall be held for his account by the Surviving Corporation.

(8) If any Common shares of Cyprus are to be issued in a name other than that in which the certificate for capital stock of Bagdad surrendered for exchange was issued it shall be a condition of such exchange that (i) the certificate so surrendered shall be appropriately endorsed and otherwise in proper form for transfer and that the person requesting such exchange shall pay to Cyprus or its transfer agent any transfer or other tax or fee required by reason of the issuance of such Cyprus Common shares in a name other than that of the holder of the certificate surrendered, and (ii) Cyprus is furnished with such evidence as it may reasonably require that the issuance of such Cyprus Common shares in a name other than that of the holder of the certificates surrendered will not result in a violation of the Securities Act of 1933 or the requirements of any State securities laws.

(9) No certificates for fractions of shares of Common shares of Cyprus and no scrip or other certificates evidencing fractional interests in such shares shall be issued. In lieu thereof if any fraction of a share of Cyprus Common stock would be issuable to any holder of outstanding capital stock of Bagdad, such fraction will be purchased upon surrender of his shares of Bagdad

as provided above for an amount in cash equal to the value of such fraction computed on the basis of the median between the high and low prices for Cyprus shares on the New York Stock Exchange at the close of business on the effective date of the merger.

(10) All Cyprus Common shares into which Bagdad capital stock is converted shall be validly issued, fully paid and non-assessable, as shall Cyprus Common shares subsequently issued upon exercise of options substituted by Cyprus pursuant to Article VII, paragraph (3), above. All of such shares shall be registered and listed for trading on the New York Stock Exchange and the Pacific Coast Stock Exchange.

#### ARTICLE VIII

Bagdad is presently operating a 5,600 ton per day mill, and this mill is expected to continue to operate profitably throughout the construction period required for a Cyprus planned expansion to a range of 30,000-40,000 tons per day or perhaps eventually larger. The acquisition of Bagdad by Cyprus presents the opportunity which Cyprus intends to pursue for a large and profitable investment by Cyprus which is expected to provide a substantial increase in earnings to Cyprus shareholders including the present Bagdad shareholders.

#### ARTICLE IX

Bagdad represents to Cyprus that:

1. Bagdad is duly organized, validly existing and in good standing under the laws of the State of Arizona.

2. The authorized capital stock of Bagdad consists of 4,800,000 shares of \$2.50 par value of which 1,610,162 were outstanding at January 31, 1973 and an additional 15,675 shares were then subject to outstanding stock options. Such outstanding shares have been validly issued and are fully paid and non-assessable. Bagdad will not make any change in its authorized or issued capital stock except as required by the exercise of presently outstanding stock options.

3. The Consolidated Balance Sheet of Bagdad at December 31, 1972 and the accompanying Consolidated Statement of Income for the year then ended certified by Price Waterhouse & Co. contained in the Joint Proxy Statement forming a part of the Form S-14 Registration Statement to be filed by Cyprus with the Securities and Exchange Commission on February 22, 1973 (the "Joint Proxy Statement") fairly set forth the condition of Bagdad at December 31, 1972 and the results of its operations for the year then ended in conformity with generally accepted accounting principles consistently applied throughout the periods shown. The Balance Sheet reflects all known fixed or contingent claims against and debts and liabilities of Bagdad, as of its date. All tax liabilities for 1972 and any prior years will have been paid in full or adequately provided for and after December 31, 1972 there will have been no material adverse change in the assets or liabilities or in the financial condition or business of Bagdad and no change except in the ordinary course of business.

4. Since December 31, 1972, Bagdad has not and will not prior to the effective date of the merger declare or pay any dividend or make any other distribution of assets to its shareholders, except for the payment of cash dividends on its Capital Stock of not more than 10 cents per share quarterly.

5. Except as set forth in the Joint Proxy Statement there are no actions, suits or proceedings pending or to the knowledge of Bagdad threatened against or affecting Bagdad which involve the possibility of any judgment or liability not fully covered by insurance and which may result in any material financial or other adverse change in the business or assets of Bagdad; and Bagdad is not in violation of nor in default with respect to any claim, order, rule or regulation of, or any tax

or other return or report payable to or required to be filed with, any federal, state, municipal, or other governmental agency, department, commission, board, bureau or other instrumentality.

6. Bagdad has furnished or will furnish to Cyprus prior to March 15, 1973, a schedule together with originals or copies of all material outstanding contracts, leases or understandings to which Bagdad is a party except those which are cancellable without premium or expense on not more than 30 days notice and except purchase orders or contracts issued by Bagdad for its requirements of raw materials and supplies or received from customers for finished products or services all in the ordinary course of business. Bagdad is not in default in any material respect under the terms of any such contract, lease, or understanding, and without the written consent of Cyprus, Bagdad will not make any changes therein and will not incur any further obligations or commitments or make any further additions to its property or further purchases of machinery or equipment except such as have been heretofore disclosed to Cyprus, or except in the ordinary course of business or except to maintain its property and equipment.

7. Prior to the effective date of the merger, Bagdad shall furnish Cyprus with such indicia of title, in form and content acceptable to Cyprus, as is necessary to satisfy Cyprus that title to, and possessory rights in, all real property, ore reserves, minerals and other property owned or possessed by Bagdad are in a condition acceptable to Cyprus.

8. At February 1, 1973 based upon information from drillholes with an average of 250 foot centers, Bagdad had in place on the properties owned or controlled by it as set forth in Paragraph 7 of this Article IX approximately 303,000,000 tons of copper sulphide ore reserves with a copper content averaging approximately 0.49%.

9. Cyprus may prior to the effective date of the merger through its representatives make such investigation of the properties and plants of Bagdad and of the financial condition of Bagdad as it deems necessary or advisable to familiarize itself with such properties, plants and other matters, and Cyprus shall have full access to the premises and to all the books and records of Bagdad, and the officers of Bagdad shall furnish to Cyprus such financial and operating data and other information with respect to the business and properties of Bagdad as Cyprus shall from time to time reasonably request.

## ARTICLE X

Cyprus represents to Bagdad that:

1. Cyprus is duly organized, validly existing and in good standing under the laws of the State of New York and is duly qualified and in good standing as a foreign corporation wherever the nature of the property owned or the business transacted by it makes such qualification necessary.

2. The authorized capital stock of Cyprus consists of 1,000,000 Preferred shares of a par value of \$4 per share and 28,000,000 Common shares of a par value of \$4 per share. No Preferred shares are outstanding. There are 8,781,600 Common shares outstanding. Prior to the effective date of the merger Cyprus will not make any change in its authorized capital stock; nor does it presently anticipate any change in the number of outstanding shares except as required by the exercise of presently outstanding stock options. The exercise of such options could increase outstanding Cyprus Common shares by a maximum of 81,825 shares by the effective date of the merger.

3. The Consolidated Balance Sheet of Cyprus at December 31, 1972 and the accompanying Consolidated Statement of Income for the twelve months then ended certified by Messrs. Lybrand,

Ross Bros. & Montgomery contained in The Joint Proxy Statement fairly set forth the condition of Cyprus and its subsidiaries at that date and the results of its consolidated operations for the twelve months period then ended in conformity with generally accepted accounting principles consistently applied throughout the periods shown. The Balance Sheet reflects all known fixed and contingent claims against and debts and liabilities of Cyprus and its subsidiaries as of its date. All tax liabilities for 1972 and prior years have been paid in full or adequately provided for and after December 31, 1972 there will have been no material adverse change in the assets or liabilities or in the financial condition or business of Cyprus or its subsidiaries and no change except in the ordinary course of business.

4. Since December 31, 1972 Cyprus has not and will not prior to the effective date of the merger declare or pay any dividend or make any other distribution of assets to its stockholders other than such dividends or distributions as shall also enure to the benefit of the Bagdad shareholders except for the payment of quarterly cash dividends on its Common stock of not more than 25 cents per share.

5. Except as set forth in the Joint Proxy Statement there are no actions, suits or proceedings pending or to the knowledge of Cyprus threatened against or affecting Cyprus or its subsidiaries or affiliated corporations which involve the possibility of any judgment or liability not fully covered by insurance and which may result in any material financial or other adverse change in the business of Cyprus; and to the knowledge of Cyprus neither it nor any of its subsidiaries or affiliated corporations is in violation of or in default with respect to any claim, order, rule or regulation of, or any tax or other return or report payable to or required to be filed with, any federal, state, municipal, foreign, or other governmental agency, department, commission, board, bureau or other instrumentality, or any material contract, lease or understanding to which Cyprus or any such corporation is a party.

6. Bagdad may prior to the effective date of the merger through its representatives make such investigation of the properties and plants of Cyprus and of the financial condition of Cyprus as it deems necessary or advisable to familiarize itself with such properties, plants and other matters, and Bagdad shall have full access to the premises and to all the books and records of Cyprus, and the officers of Cyprus shall furnish to Bagdad such financial and operating data and other information with respect to the business and properties of Cyprus as Bagdad shall from time to time reasonably request.

## ARTICLE XI

A. The obligation of Cyprus to effect the merger shall be subject to the following conditions:

1. The representations and warranties of Bagdad herein contained shall be substantially accurate in all material respects and Bagdad shall have performed all obligations and complied with all covenants required by this Agreement to be performed or complied with by it prior to the effective date of the merger.

2. No material adverse change in the financial condition or business of Bagdad shall have occurred or become known and Bagdad shall not have suffered any material loss or damage to any of its properties or assets whether or not covered by insurance since the date hereof which materially affects or impairs the ability of Bagdad to conduct its business.

3. Cyprus shall have fully satisfied itself on the basis of its study of Bagdad's records and on the basis of its own independent study of (i) Bagdad's ore reserves, (ii) the estimated capital and operating cost of a substantially expanded operation based on those ore reserves and (iii) the

marketing of copper and other products from the expanded operations that the merger of Bagdad into Cyprus will provide financial benefits which are acceptable to Cyprus.

B. The obligation of Bagdad to effect the merger shall be subject to the following conditions:

1. The representations and warranties of Cyprus herein contained shall be substantially accurate in all material respects and Cyprus shall have performed all obligations and complied with all covenants required by this Agreement to be performed or complied with by it prior to the effective date of the merger.

2. No material adverse change in the financial condition or business of Cyprus shall have occurred or become known and Cyprus shall not have suffered any material loss or damage to any of its properties or assets whether or not covered by insurance since the date hereof which materially affects or impairs the ability of Cyprus to conduct its business.

3. Bagdad shall have fully satisfied itself on the basis of its study of Cyprus' records and its own independent study that the merger of Bagdad into Cyprus will provide financial benefits which are acceptable to Bagdad.

C. Anything herein or elsewhere to the contrary notwithstanding, this Agreement may be terminated and abandoned:

1. by either of the Constituent Corporations if the New York Stock Exchange and the Pacific Coast Stock Exchange shall not approve the listing thereon upon official notice of issuance of the requisite number of Common shares of the Surviving Corporation to be issued pursuant to this Agreement of Merger.

2. by mutual consent of the Boards of Directors of the Constituent Corporations at any time prior to the effective date of the merger.

3. by Cyprus or Bagdad (a) if prior to the effective date of the merger the conditions set forth in subparagraphs 1 and 2 of Section A or Section B of this Article XII shall not have been met or if any action or proceeding before any court or other governmental body or agency shall have been instituted or threatened to restrain or prohibit the merger and the Board of Directors of either corporation deems it inadvisable to proceed with the merger or (b) if the merger herein contemplated shall not have become effective on or before October 1, 1973.

4. by Cyprus if prior to the effective date of the merger Cyprus shall not have received the favorable opinion of Snell & Wilmer, counsel for Bagdad, dated the effective date of the merger, in form and substance satisfactory to Cyprus:

(a) to the effect that Bagdad is a corporation duly organized, validly existing and in good standing under the laws of the State of Arizona, and has all necessary corporate power to own its properties and to carry on the business conducted by it.

(b) to the effect that consummation of the transactions contemplated by this Agreement and the fulfillment of and compliance with the terms and conditions hereof do not conflict with any of the terms of the Articles of Incorporation or By-Laws of Bagdad, or the laws of the State of Arizona.

(c) with respect to such matters concerning Bagdad's title to, and possessory rights in, all real property, ore reserves, minerals and other property owned or possessed by Bagdad as Cyprus may reasonably request.

5. by Bagdad if prior to the effective date of the merger Bagdad shall not have received the favorable opinion of Musick, Peeler & Garrett, counsel for Cyprus, dated the effective date of the merger, in form and substance satisfactory to Bagdad, to the effect that:



(a) Cyprus is a corporation duly organized, validly existing and in good standing under the laws of the State of New York, and has all necessary corporate power to own its properties and to carry on the business conducted by it.

(b) Consummation of the transactions contemplated by this Agreement and the fulfillment of and compliance with the terms and conditions hereof do not conflict with any of the terms of the Articles of Incorporation or By-Laws of Cyprus.

6. by either of the Constituent Corporations if this Agreement and the transactions contemplated herein shall not have been validly approved by the shareholders of both corporations.

7. by Bagdad if there shall not have been received from the Internal Revenue Service a tax ruling (which Bagdad shall make diligent efforts to obtain) to the effect that:

(a) No gain or loss will be recognized by reason of the merger either to Bagdad or to Cyprus, or to any stockholder of Bagdad *except* with respect to (i) cash received by any such stockholder for and in lieu of fractional shares in Cyprus; and (ii) amounts received upon the election of such stockholder to receive cash in lieu of shares in the transaction;

(b) In the case of any stockholder of Bagdad who elects to take cash for his shares in that corporation in lieu of participating in the merger, gain recognized will be treated as gain on a taxable sale or exchange by him of said shares;

(c) In the case of any other stockholder of Bagdad, gain recognized with respect to cash for fractional shares, or other property received by him other than stock in Cyprus, will be treated as gain from the sale of his shares in said corporation; and

(d) The basis and holding period for the shares of Cyprus received by all stockholders of Bagdad in exchange for his shares of Bagdad pursuant to the merger, will be the same as the basis and holding period of such stockholder for his stock in Bagdad except as adjustments are required under Section 358 of the Internal Revenue Code on account of recognized gain in the transaction.

## ARTICLE XII

Each party will provide the other with all the information concerning it required for inclusion in the proxy statements to be sent to the shareholders of Cyprus and Bagdad in connection with the merger, and each represents and warrants to the other that all information so furnished to the other shall be true and correct in all material respects and shall not omit any material fact required to be stated therein or necessary in order to make the statements made therein not misleading.

## ARTICLE XIII

1. Cyprus shall pay the expenses and costs incurred or to be incurred by or on behalf of Cyprus in negotiating and preparing this Agreement, calling and holding the meeting or meetings of its shareholders for the purpose of voting on the Merger, effecting the Merger and carrying out the transactions contemplated by this Agreement, including without limitation, all of its attorneys' fees and accounting fees and the taxes and/or incidental expenses to converting the shares held by the shareholders of Bagdad into the shares of Cyprus Common shares and the delivery of such shares. Subject to the provisions of Paragraph 2 of this Article XIII, Bagdad shall pay the expenses and costs incurred or to be incurred by or on behalf of it in negotiating and preparing this Agreement, calling and holding the meeting or meetings of its shareholders for the purpose of voting on the merger, effecting the merger and carrying out the transactions contemplated by this Agreement, including without limitation, all of its attorneys' fees, accounting fees and any other costs and expenses of any nature incurred by

it in relation to the merger contemplated herein. In the event the merger is terminated or abandoned by either or both of the parties for any reason, provided for in this Agreement of Merger, neither party shall have any obligation to reimburse the other party for any costs or expenses paid or incurred by it in relation to the merger contemplated herein.

2. Bagdad has engaged Merrill Lynch, Pierce, Fenner & Smith Incorporated to furnish financial advice. The amount to be paid by Bagdad for such advice remains to be negotiated. Such negotiation shall be under the direction of Cyprus. If the merger contemplated by this Agreement of Merger for any reason is not consummated any such obligation shall be exclusively the responsibility of Bagdad, in which event, the negotiations shall be under the direction of Bagdad. Except for the possible obligation to Merrill Lynch, Pierce, Fenner & Smith Incorporated each of the parties hereto represents and warrants to the other party that it has incurred no obligation for the payment of any brokerage commission, finders' fee or similar obligation in relation to the transactions contemplated by this Agreement of Merger.

#### ARTICLE XIV

1. *Notices.* All notices, requests, demands and other communications called for or contemplated hereunder shall be in writing and shall be deemed to have been received:

(a) upon personal delivery or 48 hours after being sent by telegram or mailed by United States certified or registered mail, return receipt requested, postage prepaid, addressed to the parties at the addresses listed below or at such other addresses as the parties may designate by written notice in the manner aforesaid:

If to Cyprus: Cyprus Mines Corporation  
523 West 6th Street  
Los Angeles, California 90014

With a copy to:

Musick, Peeler & Garrett  
One Wilshire Boulevard  
Los Angeles, California 90017

If to Bagdad: Bagdad Copper Corporation  
55 East Thomas Road  
Phoenix, Arizona 85012

With a copy to:

Snell & Wilmer  
400 Security Building  
Phoenix, Arizona 85004

2. *Entire Agreement.* This Agreement constitutes the entire agreement between the parties with respect to the subject matter, superseding all prior oral or written negotiations, agreements or understandings with respect to such subject matter.

3. *Amendments.* The parties hereto by mutual agreement, approved by the respective Boards of Directors of Cyprus and Bagdad, from time to time, prior to the approval of the stockholders of such corporations, may amend this Agreement to facilitate the performance hereof or to comply with any applicable law of any jurisdiction or for any other purpose.

4. *Assignability.* The rights under this Agreement are not assignable. Except as specifically provided herein, nothing contained in this Agreement, express or implied, is intended to confer upon

any person or entity other than the parties hereto and their successors in interest any right or remedies under or by reason of this Agreement except as specifically provided herein. All of the terms of this Agreement shall be binding upon and inure to the benefit of Cyprus and its successors and shall be binding upon and inure to the benefit of Bagdad and its successors.

5. *Severability.* Any term of this Agreement that is illegal or unenforceable at law or in equity shall be deemed to be modified or void and of no force and effect to the extent necessary to bring such term within the provisions of any applicable law or laws and such term as so modified and/or the balance of the terms of this Agreement shall be fully enforceable.

6. *Construction.* Except to the extent that the internal laws of the State of Arizona necessarily apply, this Agreement shall be construed and enforced in accordance with the internal laws and not the conflicts of law statutes or doctrines of the State of New York.

7. *Enforcement Costs and Expenses.* In the event of any proceedings or actions to enforce the provisions of this Agreement prior to and/or after the effective date hereof, the court or body before whom the same shall be heard or tried may award to the prevailing party all damages, costs and expenses thereof, including but not limited to reasonable attorneys' fees.

IN WITNESS WHEREOF, this Agreement of Merger has been executed on behalf of Cyprus by its officers thereunto duly authorized, and on behalf of Bagdad by at least a majority of its directors, as of the day and year first above written.

CYPRUS MINES CORPORATION

By HENRY T. MUDD  
Henry T. Mudd  
Chairman of the Board  
and Chief Executive Officer

ATTEST:

GERALD G. KELLY

Gerald G. Kelly  
Secretary

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J. N. Anderson

---

WALTER R. BIMSON

---

Walter R. Bimson

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ROBERT C. BOGART

---

Robert C. Bogart

---

GEORGE W. COLVILLE

---

George W. Colville

---

WILLIAM T. GARLAND

---

William T. Garland

---

DAVID C. LINCOLN

---

David C. Lincoln

---

JOSEPH T. MELCZER, JR.

---

Joseph T. Melczer, Jr.

---

FRANK L. SNELL

---

Frank L. Snell

---

ROXIE WEBB

---

Roxie Webb

Directors

BAGDAD COPPER CORPORATION

## **EXHIBIT B**

### **SECTION 10-347, ARIZONA REVISED STATUTES**

#### **§ 10-347. Payment for shares of dissenting shareholder; valuation**

A. Any shareholder of the corporations consolidating who votes to reject the agreement, and who does not consent to the agreed manner of converting the shares of stock, shall be paid in cash the fair value of his stock, based on its pro rata share of the fair value of the net assets of the corporation of which he is a shareholder as of the time of the consolidation meeting. In the event of disagreement, such value shall be determined by the court in an action by either the dissenting shareholder or the corporation, and the corporation's existence shall be continued for that purpose.

B. Every shareholder shall be deemed to have consented to such method of conversion unless he gives written notice of dissent to the president, secretary or statutory agent of the corporation not later than two days after the consolidation meeting, and unless he commences an action in the superior court of the county in which the principal office of the corporation is located to fix the value of his shares, not later than thirty days after such meeting. After the hearing the court shall determine the value of the dissenting stock, and the corporation shall pay the owner the sum so determined within thirty days after final judgment, whereupon the stock shall be transferred to the corporation.



# BAGDAD COPPER CORPORATION NINE MONTHS REPORT 1972

November 10, 1972

A summary of operating results for the Company is shown in the table below. Figures are consolidated but unaudited.

	First Nine Months 1972	First Nine Months 1971
Sales	\$ 24,041,000	\$ 18,284,000
Net Income from Operations	\$ 3,099,000	\$ 2,019,000
Extraordinary Item		\$ (838,000)
Net Income	\$ 3,099,000	\$ 1,181,000
Per Share *		
Net Income from Operations	\$ 1.93	\$ 1.26
Extraordinary Item		\$ (0.52)
Net Income	\$ 1.93	\$ 0.74
Copper Production - pounds	28,968,000	29,495,000
Copper Sales - pounds	33,200,000	23,725,000
Copper Price per Pound	50.5¢	51.1¢

\* Based on currently outstanding 1,606,740 shares.

## OPERATIONS

Sales for the first nine months of 1972 were 31% greater than for the same period in 1971. This increase is primarily due to increased sale of copper products from the Mine. Net income to date in 1972 is 162% greater than for the same period last year, and net income from operations is 53% greater. This improvement comes primarily from three sources: first, last year's earnings were depressed by writeoff of the Hurricane subsidiary, second, 9.5 million pounds more copper were sold this year than last, and third, profit contribution from subsidiaries is greater this year.

Increased sale of copper this year did not result in a proportionate increase in net income because of industry cost increases since last year. For the first nine months of 1972 compared to the same period in 1971, costs on concentrate smelting and freight increased more than two cents per pound of copper, and all cost increases spread over all copper amount to about five cents per pound. We can expect additional increases in smelting and freight costs, but I believe the major cost increases at the Mine are behind us.

Recent markets for copper have not been active. Primary producer price continues to be 50.6 cents per pound, and there is sufficient supply so that increase of this price in the near future is not likely. On the other hand, costs in the copper mining industry are high enough so that price deterioration is not likely. Markets for copper powder are showing slight improvement.

Inventory of cathodes and powder are at normal levels, but at the end of September we still had three million pounds of copper in concentrate form. This is down from 4.3 million pounds at the beginning of the year. We expect to ship about half of this inventory by the end of this year. It will be shipped to White Pine, Michigan, which will incur a freight penalty. We continue to ship the majority of our concentrate to the ASARCO Smelter at Hayden, Arizona, but they are unable to take all of our output. We have agreed to a new one-year contract with ASARCO starting in October of this year. This contract will increase costs about two cents per pound.

Sales at Garland are significantly greater this year to date than for the first nine months of last year. Net income is also greater this year. Shop and field crews at Garland are currently as busy as they ever have been. The Company appears to be well organized for the future and making good progress.

Sales at our Plastics operation have also been higher this year to date than last year. This operation is now showing nice profit ratios, which compare to quite large loss ratios last year. Additional improvement is expected when the move into the new plant has been completed.

## EXPANSION

During the third quarter we engaged Parsons-Jurden Company (a large engineering contractor) to evaluate application of Roast-Leach-Electrowinning (RLE) as a method of treating concentrate produced at Bagdad following our expansion. This technique underwent about two years of pilot testing at Bagdad in the 1950s and worked well from the operating and technical standpoints, but economics were not attractive at levels of production that existed in the 1950s. Acid produced in RLE is more difficult to dispose of than from many other techniques. The RLE process is in use in the production of copper at other operations in the world and is performing satisfactorily, including removal of sufficient sulphur to meet Arizona pollution standards. RLE has the advantage of producing a fully refined product. It also uses production techniques much closer to the competence of our present organization than other methods. We are currently evaluating the Parsons-Jurden report to determine if economics are satisfactory at the expected expanded levels of production.

We will meet with lead banks the second week of November to determine how much of our expansion financing they are willing to undertake. This will establish the magnitude of the remaining financing, and will enable us to be specific with those that might provide this. It is probable that the portion of the financing not provided by the banks will require some equity participation in the project. Several organizations have expressed definite interest in negotiating an arrangement as soon as we are able to be specific.

I hope to have financing sufficiently arranged by the end of December so that we can proceed with full scale engineering and design at that time. Completion of the program through engineering, construction, and start up will require about three years, although this time might be shortened slightly as the result of preliminary engineering and design activity during the past year.

## DIVIDEND

At a meeting of the Board of Directors on September 27, 1972, dividends were declared in the amount of 9.6 cents per share cash and 6% in stock. Both of these are payable November 10 to stockholders of record October 10. Fractional shares are being paid in cash. Accordingly, enclosed are the following:

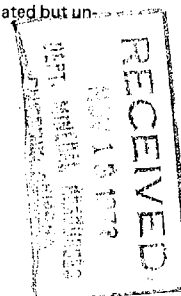
1. A check for a cash dividend of 9.6 cents per share of stock. This is reduced from the normal 10 cents per share because of the Economic Stabilization Act. Total cash dividends paid in a year are not allowed to grow more than 4%. Bagdad paid a 5% stock dividend at the end of last year, so that if we had continued 10 cents per share for all four quarters of 1972, our total cash dividend payout would have exceeded the 4% allowed by 1%. We placed the 1% reduction all in the fourth quarter dividend.
2. A stock certificate representing the 6% stock dividend. If on October 10 you owned less than 17 shares of the \$2.50 par value Common Stock, no certificate is enclosed.
3. A check representing payment in lieu of any fractional stock to which you otherwise would be entitled as the result of the 6% stock dividend. All fractional shares are being paid in cash at the rate of \$33.50 per share, which was the stock price on October 10, 1972. For example, if you owned 95 shares on October 10, the stock dividend would entitle you to 5.7 shares. A certificate for 5 shares would be enclosed, in addition to a check for \$23.45 representing payment for the 0.7 fractional share at \$33.50 per share.
4. Internal Revenue Service Form 1099 showing aggregate dividend paid to you by Bagdad during the year 1972 and any cash received by you in lieu of fractional shares referred to in paragraph 3 above.

In opinion of counsel for the Company:

1. All dividends are taxable as ordinary income.
2. No income tax is payable by reason of receipt of the stock as a stock dividend.
3. The cash paid in lieu of fractional shares is taxable as ordinary income.

The 1099 Form is for your records, and this information should be taken into account in preparing any income tax returns that you file for the year 1972.

Sincerely,  
BAGDAD COPPER CORPORATION  
David C. Lincoln, President



### *Introduction*

It is an honor to be here this morning and tell you about Bagdad Copper Corporation.

### *Background*

Let me start by highlighting our past. We are primarily an open pit copper miner, located 120 miles northwest of Phoenix. Our original claims were patented almost 100 years ago, but real development of the mine did not begin until World War II. Bagdad was an underground mine during World War II but was converted to open pit during the latter 40's.

Starting in 1942 and continuing for several years the Lincoln family acquired stock in Bagdad, and our group now owns slightly more than half of the outstanding stock.

### *Present Status*

Bagdad currently mills about 6,000 tons per day of ore with a grade of 0.67% copper, and the present ore body will last for 20 more years. Ratio of waste to ore is now about 0.8:1, but for a number of years we have been stripping at a rate of about 4:1, so we have been gaining on this factor. The mill produces a sulphide concentrate that is sold to American Smelting & Refining Company for processing through their smelter at Hayden, Arizona. Price is based on primary producer price, with deductions for smelting, refining, and freight. Copper content of the sulphide concentrate is between 20 and 24 million pounds per year.

We also produce about 14 million pounds per year of copper from leaching ore. Much of the material overlaying the sulphide ore has acid soluble copper that will not respond to the concentrate milling process. This has been piled in canyons over the years, and about ten years ago we commenced leaching operations. Weak acid is sprinkled on the ore and the resulting solutions are treated by our new liquid-ion exchange electrowinning plant. The output of this is pure cathode copper and is sold to tube and wire mills. Life of the leaching operation is difficult to forecast because ore is treated in place. If all leaching

copper were recovered at the present rate, there would be 40 or 50 years remaining life. Assuming half is recovered, life of the leaching ore will be somewhat longer than the sulphide ore.

We also produce pure copper powder by hydrometallurgical techniques. Feed for this plant is purchased and the powder is sold to the powder metal trade for use in bearings, clutches, brakes, etc. Powder sells for a premium of 15 to 20 cents per pound over base metal price.

We have acquired some non-copper operations for diversification. Chief of these is Garland Steel Company, which is a sound local steel fabricator, with some interesting proprietary products. Bagdad Plastics Company is a second diversification that produces rigid foam for packaging and has a line of patented plastic valves. We like the growth potential of the plastics industry. One diversification move that did not work out was the car wash business. We entered this because Garland had been manufacturing equipment for Hurricane Car Wash Systems, Inc., and over the years had built up a considerable inter-company receivable. In mid-1970 Hurricane encountered financial difficulties, and rather than eat the receivable we decided to support Hurricane by acquiring a majority of its stock and advancing it money. We were right on a couple of things; the Hurricane product line is as good as any in the industry, and the car wash industry is growing very rapidly. However, we were wrong on a couple of things; Hurricane's marketing organization was not well developed, and many of the actions taken by Hurricane before we entered the picture have lead us to lawsuits which became so numerous that we were spending most of our time on them. Consequently, we decided to withdraw further support. We will write off our interest in Hurricane in 1971, which will really hurt earnings this year. However, the loss is in no way large enough to effect the basic strength of Bagdad.

A word or two about costs. In 1970 production cost of our sulphide copper was about 19 cents per pound. Refining, smelting, and

freight deductions were about 11 cents per pound. We have been stripping ahead, so that about a nickel of the production cost might be assigned to advanced stripping. Cathode production just started last year, but this year to date cathode costs, including freight, have been about 13 cents per pound. G&A costs spread over all production are about eight cents per pound. Molybdenum and silver give a credit equivalent to about one and one-half cents per pound of all of our copper. Putting these numbers together gives a break-even point of about 30 cents per pound of copper. Depreciation adds on the order of four cents per pound, but these figures include the cost of excess stripping.

#### *Copper Markets*

Trying to forecast the copper market is like trying to forecast the location of a trout in a mountain brook. During 1971 the industry emerged from several years of excellent markets. We are perhaps a trifle spoiled. It appears that productive capacity will exceed demand for the next few years, but there are a number of things that could influence this. The situation in Chile is unstable, with some loss of production occurring. Peru could go the same way, although they appear to be learning from the lesson of Chile. Copper consumption in eastern Europe and China will undoubtedly increase. Whether or not their production will increase to match this is unknown. Status of Free World economies is also a significant modifier. Putting these factors together, there is some feeling in the industry that markets will be soft until mid-decade, after which demand will catch up with present excess capacity and markets will firm.

Bagdad sells most of its copper in the primary producers market, which has less fluctuation, both up and down, than dealer markets.

#### *Future*

Where is Bagdad going in the future? We are pointing toward a major expansion of our present mine. We have blocked out an addi-



Additional 230 million tons of ore with a grade of 0.47% copper. Stripping ratio over this is not much more than 1:1. The project would increase milling capacity for the sulphide part of our business by four times; to 24,000 tons per day. Leaching production would not be changed. This would increase total copper production to about three times present levels during the first years of the project, and it would taper off to somewhat more than two times present production during the last years of the project. Including some additional ore below the 230 million tons, mine life of the expanded operation would be about 30 years.

We are quite comfortable with the project through production of concentrates. Mine and milling processes would be the same as the present operation. We would merely handle four times as much ore. Stripping rate would be about the same as at present because we are currently stripping at about four times the necessary rate. No additional advanced stripping would be needed. We could use most of our present support and townsite facilities, although some expansion would be necessary. Employment for the expansion would increase only 10% to 25%, depending on whether or not we smelt at Bagdad. Up to this point the project looks very attractive to us.

A problem arises with smelting. American Smelting & Refining Company cannot take the additional material, and their pollution problem will increase smelting costs substantially. We are studying three alternatives, all of which meet present pollution requirements. The first is construction of a smelter at Bagdad to treat only our material. This would be a small smelter by industry standards, and would use a new Australian process called WORCRA. This is inherently less costly than other processes, so not much economy would be lost as a result of the small size. The second alternative is a joint venture smelting project with other Arizona copper operations that are in our situation. This would be a full size smelter, and we would own our pro-rata share. The third alternative would be to custom smelt our con-

centrate through a new custom smelter that is proposed to be built somewhere in the Mississippi River Valley. All three alternatives are still open.

Capital cost for the Mine part of the program is about \$54 million, most of which is for a completely new concentrator. The present concentrator would operate up to the time the new one started, which should eliminate production loss due to changeover. Capital cost for either of the smelting options would add \$25 million. Of course, the custom smelter option would have no additional capital costs. Breakeven copper price for this project is on the order of 25 to 30 cents per pound, plus debt service which might be on the order of ten cents per pound. It can be seen that the project will lower our before debt service breakeven point, and because of the increased production, give a considerable boost to earnings per share.

We have sufficient cost data to prepare preliminary projections, and we are talking to several people that might be helpful in financing. We are establishing patterns of financing that might be available, and we will attempt to do the project without equity surrender. Hopefully, we can get the smelter picture clarified by the end of this year, and have the financing framework in focus by that time. During 1972, we could complete financing arrangements and do most of the engineering. Construction would take place during 1973 and 1974, and we would be on stream in 1975, which is about mid-decade when the sages say the copper market will strengthen.

Until this project is complete, we have no further diversification in mind. Our corporate course following the Mine expansion is unplanned. We will probably want to spend the first years after the new program goes on stream concentrating on debt reduction.

Thank you.

*David C. Lincoln, President  
Bagdad Copper Corporation  
Phoenix, Arizona*



A Presentation By

# BAGDAD COPPER CORP.

To

New York Society  
of Security Analysts



Speaker

David C. Lincoln, President  
Phoenix, Arizona

March 26, 1970

*Mr. David C. Lincoln, President  
Bagdad Copper Corporation*

It is a great honor to be here and a pleasure to have the opportunity to talk about my favorite subject, Bagdad Copper Corporation. With me this afternoon is Bob Bogart, Vice President of the Company and Assistant General Manager of the Mine, and Mr. William (Pat) Garrity, who has just joined us as my Assistant. One of Pat's jobs will be to maintain lines of communication with the financial world.

*Perspective*

Let me begin by putting Bagdad into perspective. Our sales are more than \$20 million per year. After tax earnings are more than \$3 million per year. Net worth is \$23 million. We have about 1 1/3 million shares outstanding. On a per share basis, earnings in 1969 were \$2.33, and book value is about \$17. Recent price of our stock has been in the \$26 region.

Our primary business is mining, milling, and refining of copper. We have diversified into steel fabrication and plastic molding. Mining operations are located at the Bagdad Mine, which is about 125 miles northwest of Phoenix. Steel fabrication is at Garland Steel Company in Phoenix; the plastic operations are in Phoenix and Santa Ana, California.

The Mine is by far the largest and most important segment of our business. Original claims on the Mine were taken in the 1880's. Between then and World War II, the operation was an on-again, off-again proposition, with a little stock promotion mixed in. World War II gave the impetus to make Bagdad into a producing mine.

The Lincoln family began to acquire Bagdad stock in the latter part of World War II and by the middle to latter part of the 1940's we had acquired a little more than 50%, which is our present position.

*Present Objectives*

Five or six years ago we were faced with a basic corporate decision. We had a well developed ore body that was generating cash. We decided to use this as a basis for future growth,

both expand our mining operation and diversify. We decided we wanted to stay independent and be the dominant partner in any acquisition.

Our primary growth target is mining, where copper is, of course, of most interest. We have also looked at a wide variety of other minerals. We are most interested in mines located in the western part of the United States, but we have looked elsewhere in the country and other places in the world.

Our second programmed target for diversification and growth is plastics. We have just completed a rather extensive study of the plastics business, and this appears to be an attractive diversification for us. We would be converters and would not make the basic material.

A third area of growth should be in steel fabrication, but here we expect growth to be internal to Garland Steel Company and not through acquisitions.

#### *Base for Future*

Let me tell you a bit about where we think we are now, what steps we have accomplished in our expansion and diversification, and then what we feel the future might hold.

I feel we have good management. This is particularly true at the Mine. Under George Colville, General Manager, and Mr. Bogart we have an excellent group of superintendents and foremen. Bill Garland built his company, Garland Steel Company, from nothing and has good people under him. In our plastics operations we have really not had a chance to evaluate management because these operations are so new. None of our operations have great depth of management. This is one of our weaknesses.

We have good employees. None of our operations are unionized, but we maintain wage and benefit levels comparable to our respective industries. We have a profit bonus system, and we think we have an edge on other operations in productivity.

We feel that a primary objective is to make a contribution to the commercial world. Unless we are contributing something, we feel that we

cannot expect to get something out. If we make a good contribution, we feel that profits will be good.

We feel that employees are our most important asset and should be treated accordingly. And, of course, we realize that the shareholders own the business.

The Mine is the base for the future. The ore body is well developed, as I mentioned a moment ago. Our equipment and facilities are not new, but they are adequate and in good order. We are in a favorable position as far as stripping is concerned. Mine life at our present rate of production will be another 22 years. Production from sulphide ore is 20 to 24 million pounds of copper per year.

#### *Steps in Bagdad Growth*

Let me outline some of the steps we have taken in our program over the years. First was the leaching operation which began in the early 1960's. This added 14 million pounds per year of copper production, bringing the total to 35 million pounds per year or more. Leaching production can be expected to taper off over the years, but we expect it to last at least as long as the 22 year life of the sulphide ore body. At our present rate of recovery, less than half the copper in the leaching ore would be recovered in the next 22 years.

The second step we took was refining of cement copper to powder metal for use in the powder metal trade. This was attractive to us because there should be good profit in this conversion. Also, refining some of our own production reduced our dependence on the smelter to which we otherwise ship our production. A third factor that attracted us was the fact that the powder market is small and specialized, one in which we could be a major factor, but one that was too small to be of interest to major copper companies.

The project has had many troubles since its inception, most of which have had to do with process and plant difficulties. We have recently gotten enough of these solved that the operation is now profitable. The project was started as a joint venture with Chemetals Corporation, but they have since left, and we have bought

leir half. Capacity of the refinery is about eight million pounds per year, which is only half of its original design goal. However, at this rate we should make a comfortable profit, and we will be serving about a fifth of the market for our type of powder.

In 1969 the refinery had an operating profit of \$269,000, which is four cents per pound. This should increase to about six cents per pound in future years. Depreciation will take about three cents per pound, so that before tax profit will be about three cents per pound. Average markup in 1969 over metal was 17 cents. We base our price approximately on the primary producer price.

A step we are currently taking is construction of a solvent extraction-electrowinning refinery. This should be onstream this coming summer and will enable us to produce cathode rather than cement copper. Cathode is about seven cents per pound more valuable than cement, but costs of producing cathode will be about the same as producing cement. This should give us about \$1 million per year more income, which works out to be about 1/3 of a million dollars after taxes, or on the order of 25 cents per share.

This is only a six or seven per cent after tax return on the investment, which is not very good and leads to the real reason we are building the plant. Iron must be used in the present leach circuit, and this chemically contaminates our ore. The solvent extraction plant eliminates the use of iron and should enable leach production to be maintained at levels considerably in excess of what we would otherwise experience. Unfortunately, it may not enable us to increase production over past levels.

A fourth step in our expansion was acquisition of Garland Steel Company, which was accomplished in January of 1967. Garland is a good, well managed local company. It gives us some diversification without remote operating and management problems. Garland earned \$162,000 in 1969. We have elected to rapidly write off a patent which should be completely off the books by the end of this year. If this write off had not been taken, 1969 profit would

have been about \$220,000 after taxes, which is about 15 cents per share.

The fifth step in our program has been plastics. This industry is attractive to Bagdad because we expect plastics to expand substantially in excess of the economy for the foreseeable future. Plastics is becoming a basic industry. It requires good, sound management, but it is not exotic like electronics. We have chosen to concentrate most of our diversification activity in one industry, rather than scatter through a wide range of industries.

The first milestone in plastics that I am shooting for is \$1 million in after tax profit. This will require \$20 million or more in sales, which gives us a long way to go, but the opportunities are there.

Packaging is a segment of the plastic industry that appears very attractive to us, and we are focusing current acquisition efforts there. We are not ignoring other parts of the industry.

Bagdad Plastics Company, started in 1967, and makes custom molded polystyrene packaging. This currently is very small, having only about one-quarter million dollars sales in 1969, but it has gained us familiarity with the industry and is growing.

Braham Industries was acquired last summer. This is a marketer of injection molded plastic valves. All of the molding is subcontracted. Markets are new, but the product appears to be gaining acceptance. I sort of hate to admit it, but plastics seem to do as good a job, or in some cases better, than brass valves which they replace. Braham is forecasting sales in 1970 of \$1 million. If they can do this, it will be a real achievement.

#### Costs

This is about where we have come. Before we look at the future, let me comment on our mining costs.

In the sulphide part of our Mine, operating costs are about 20 cents per pound. Smelting and freight add about 11 cents to this, for a total of 31 cents per pound. This cost includes about eight cents per pound for stripping, but we are stripping at three or four times the rate

added to keep up with mining. So perhaps a nickel of the eight cents might be considered for the future.

Leach operating costs are about 14 cents per pound. Smelting and freight add about eight cents to this, for a total of 22 cents per pound. It should be kept in mind, however, that all mining costs for leaching have been charged to sulphide under stripping.

Composite cost for the two operations, including smelting and freight, is about 27 cents per pound. Overhead adds about seven cents to this, and depreciation adds another three cents. Total cost then comes to about 37 cents. However, we produce some molybdenum and silver, and this produces a profit of about two cents per pound of copper, so that our break-even point is about 35 cents. If we remove the excess stripping expense, the break-even point drops to about 32 cents. This gives you a general idea of our costs. I don't think we are the lowest cost mine in the industry, but neither do I believe we are the highest.

This is, perhaps, an appropriate point to comment on why 1969 earnings were lower than 1968. In 1967 and 1968 there was an industry strike, but Bagdad continued to operate. We sold in 1968 about 3.5 million pounds of copper that was produced in 1967, but which could not be sold during 1967. During the industry strike we were selling outside of our regular channels, and these sales were charged a considerably smaller smelting and freight charge than normal. Averaged over all of our 1968 production, this was about 2.5 cents per pound. These two factors gave considerable boost to 1968.

Higher prices in effect in 1969 gave a boost to that year, but the 1969 boost was not sufficient to match 1968. With the higher prices currently in existence, I fully expect 1970 to be better than 1969.

#### *Future Growth Prospects*

Let me turn now to what I feel some of our future projects might be.

Plastics will continue to be our non-mining expansion target. If we are skillful, this should have an important impact on our future.

We are seriously searching for another leaching ore body that can provide feed for the powder refinery after the solvent extraction plant goes into operation.

A third possibility is refining of all our own copper. We have been looking for a method to do this for many years. There are some promising ideas, but nothing is imminent.

The most interesting thing currently is the large body of low grade copper material adjacent to our present ore. It is contiguous to our present ore body and is merely the lower grade material that occurs in any ore body. The further out you get from the heart of an ore body, the lower the grade becomes, but the larger is the tonnage.

We feel we have verified 200 million tons of material with 0.5% copper grade. Stripping ratio would be about 1.5:1. To put this in perspective, our present ore body is 46 million tons with a grade of 0.69% copper, and a stripping ratio of not much more than 1:1. Stripping for the 200 million tons would add about 110 million tons of leach ore to our leaching dumps, and the grade of this would be about 0.4%. When stripping of the present ore body is complete, we will have about 85 million tons of leach material in place with a grade of about 0.5%. We are currently having our data on the low grade material verified by independent consultants.

To add further perspective to this, at our present 6,000 tons per day rate of mining, the present ore body will last about 22 years. If we were to mine the 200 million tons at 25,000 tons per day, it also would last about 22 years. At this rate, we would recover about 35,000 tons per year of copper, which is about three times our present sulphide production.

We should also be able to increase leaching production from the present rate, but probably not three times. I honestly do not know costs of this project. Capital expenditure could be on the order of \$50 million. We are beginning to look at operating costs, but it will be some time before we have the plant and operation well enough outlined to be able to guess at costs.

There are two advantages this project has that are unique to us. Metallurgy of extraction

the material should be pretty well known, since we are presently mining the adjacent material. Also, organization and support facilities to carry out the project are already at Bagdad and operating.

#### *Industry Comments*

Let me briefly comment on our industries.

Copper is growing, but probably not at a rate equal to the economy generally. I estimate copper to be growing at about four per cent a year. Copper is a good, basic metal and its consumption is well spread throughout all industry. Because of this, it is not severely subject to rapid replacement by competing materials.

Bagdad is a small factor in the copper industry, but we do have the advantage of being an entirely domestic producer.

Copper price has been excellent for the last few years. Bagdad is tied to the primary producer price, but when we get cathode production from the solvent extraction plant, we will sell this in the dealer market, which under today's conditions should give us some benefit. I expect primary producer price to hold at 56 cents for at least most of 1970, but I also expect dealer premiums to decline. I must also say that I have been a terrible forecaster of copper prices in the past.

The government is investigating the copper pricing situation, but I do not really see that they can ask for many radical changes.

Markets for copper powder have been quite flat for the last two or three years as a result of limited supply and high prices. Over the long run, I expect powder markets to grow at about the same rate as copper generally. Bagdad can show production of powder starting from ore in the ground, which gives us an advantage over our competitors. If we in the powder industry can learn to lower the cost of producing powders so they can sell for about five cents over metal, I believe there would be tremendous new markets for this material. This requires a technological breakthrough.

Steel fabrication markets at Garland are

closely tied to the Arizona region, but growth in Arizona will probably exceed national averages for some time. Within its market Garland is well received, and the Special Products at Garland, such as the cotton machinery, add extra interest.

The plastics industry has been growing at two or three times the rate for the economy generally. One set of figures shows 14% per year compounded. The nature of this industry appears to be one that will call for scattered plants throughout the country rather than concentrated large plants. Freight is one reason for this. Another is that a large plant would merely consist of more machines of the same size, rather than fewer larger machines. This means that basic productivity does not increase as the production unit gets bigger.

Bagdad is attempting to acquire a series of well managed regional plants.

#### *Overall Evaluation*

Let me close with an overall evaluation of how I feel about Bagdad. We have a well developed ore body, which is giving good cash flow and is an excellent base for growth.

The low grade copper around our present ore body is a wonderful prospect for major expansion.

Plastics are an exciting diversification.

Bagdad is small, which obliges us to operate a little differently than bigger companies. We do not have great management depth, and in our mineral exploration we cannot appropriate the millions of dollars that the major companies do.

I thank you very much, and we would be happy to attempt to answer any questions you may have.



## Questions

Question: Your Annual Report mentioned increasing income tax rates. Would you indicate what the effective tax rate will be in 1970?

Reply: (Mr. Lincoln) The new tax law puts a 10% tax on sheltered income, and depletion allowance is in this category. In the past, depletion has sheltered about a quarter of our before tax income. If my mental arithmetic is correct, our before tax income is \$4 to \$4½ million, and a 10% tax on a quarter of this is about \$100,000. (Upon reviewing the answer to this question after returning home, I find my mental arithmetic was not correct. Depletion increases after tax income by about one quarter, so that it shields roughly half of before tax income. In 1969 before tax income was \$4.9 million and a 10% tax on half of this would be about a quarter million dollars).

Question: How do you plan to finance exploitation of the low grade copper ore if you go ahead? I understand about \$50 million is involved.

Reply: (Mr. Lincoln) The \$50 million is only a guess. The true amount could be half of that; it could be twice that. We have not determined a method of financing. Our first approach would be to see if we could do it by ourselves through some combination of bank loans and debt and equity issues. If this is not possible, another approach would be to join some larger company in a joint venture or merging.

Question: Has there been any feasibility study regarding the cost of the new project?

Reply: (Mr. Bogart) Presently, we're having an engineering construction firm prepare a detailed cost estimate of mill requirements, but this work is just beginning. We have a preliminary flow sheet. As yet, we have no cost figures on equipment or facilities.

Question: Could you give us some indication to specific markets for the powdered copper that you produce?

Reply: (Mr. Lincoln) We serve two markets. One is friction material such as clutches and brakes. These are principally for heavy equipment; although they are beginning to put disc brakes on automobiles.

The second market is molding and the largest application is sleeve bearings. In addition, powder can be molded into gears, locks, and all sorts of things. In many cases molding is much less expensive than casting or machining and molded powdered parts are about as strong as raw metal.

(Mr. Bogart) Another application is iron-copper powder mixes. For example, some steering parts on an automobile are made from pressed iron powder which will have added from 3% to 13% copper powder. The copper adds strength to the iron part.

Question: Would you give us some feeling about your mining, milling and smelting cost trend over the past three years and what you can expect over the next two years?

Reply: (Mr. Lincoln) Our costs, including overheads, during the past five years have increased at a compound rate of about 4%. Most of this has been in overhead. In the future I do not expect the 4% to decrease much. Inflation will continue. To counter this, we constantly improve in our efficiency, so our costs are increasing slower than normal inflation.

Question: Are you restricted to primary producer price for your copper?

Reply: (Mr. Lincoln) Any copper that we do not refine ourselves must be sold to American Smelting & Refining Co. at about primary producer price. We can sell metal that we refine ourselves in any market we choose. So far, we

be chosen to price copper powder approximately at primary producer price, plus tollage. When we get cathodes beginning this summer, they will be sold into the dealer market.

Question: What do you ultimately expect to be your capability for cathode production?

Reply: (Mr. Bogart) The electrowinning plant is designed for 14 million pounds a year. There may be a little excess capacity, but the 14 million pounds is our present full leach production.

Design is such that expansion should cost less per unit of production than the original plant.

Question: In order to justify expanding the electrowinning plant, you would have to have another source of leach material; is this correct?

Reply: (Mr. Bogart) Either our own or purchased. There is a possibility we might make a small profit by toll refining copper for others. We have no plans for this, but if the capacity is such that to operate at 100% requires some toll refining, we might do this.

Question: Can you readily get another supply of leach material? Isn't this something that other miners generally try to process themselves?

Reply: (Mr. Lincoln) Cement copper is available from smaller mines than sulphide. To bring a sulphide ore body into production is a major project. To bring a leaching operation into production is not nearly as difficult and there are leaching operations too small to justify having their own refining capability.

Question: Do you see the possibility of acid raw material costs coming down in the near future?

Reply: (Mr. Bogart) The softened sulphur market has already lowered our cost of making sulphuric acid. Longer range, as the smelters reduce pollution by converting their emissions

to sulphuric acid, the price of acid could go to a point that we would want to purchase acid and put our plant in standby.

Question: Could you comment on the present state of political environment towards pollution in Arizona? Is there legislation pending in the near term that would have an impact on you or some of the other miners in the area?

Reply: (Mr. Lincoln) Bagdad creates no pollution because we do not smelt.

In Arizona we have much the same political situation on pollution that exists elsewhere in the country. Smelters do pollute the air and they have been mildly denying this for years. I don't mean this in any derogatory way against my fellow copper miners. They have been denying it for good and logical reason because about 85% of the pollution in Arizona comes from the automobile. Why attack the smelters first when elimination of all that pollution might reduce the total only 4% or 5%. On the other hand, smelter stacks are an obvious source of pollution. If they fail to clean up themselves, legislation will require it.

To their credit, the smelters have been spending millions and millions of dollars to solve this problem, and they are making good progress. This started before any legislation forced them.

It is a tough problem technically. I think the smelters will eliminate 80% to 90% of their emissions before long and without inordinate difficulty. However, you can clean up 90% of the pollution from a smoke stack, and it will not look much different. Going from 90% elimination to 99% is the tough job, and that is where research effort is now being applied.

Question: Would you make a comment about your exploration activity and your plans in that regard?

Reply: (Mr. Lincoln) Last year we spent about \$150,000 on exploration. This is small compared to the major companies. I don't know how it compares in ratio of our size to their size.

Question: Are you doing any exploration outside of your immediate area?

Reply: (Mr. Lincoln) Yes. Most of this is visual observation and prospecting. Occasionally we find something that is interesting enough to drill or do some I.P. work.

Question: You made a comment in your remarks about the growth that you estimated for copper, saying that it was approximately the same as that for the gross national product. Is this an evaluation of the growth of copper in the United States or is there a larger sphere of consumption that you are referring to:

Reply: (Mr. Lincoln) I had in mind world consumption. In the next ten years there may be a greater rate of growth in foreign markets than in U.S. markets.

Question: Do you anticipate any increase in molybdenum and silver production and have you discovered any nickel?

Reply: (Mr. Bogart) Molybdenum and silver production about parallel the production of copper. There will be fluctuations in each, but probably less fluctuation in molybdenum. We have found no nickel in our ore body.

Question: Has there been any indication that any of your customers have been able to build up any inventory in recent months?

Reply: (Mr. Lincoln) All of our output other than powder goes to American Smelting & Refining Company. Whether or not their customers have been able to build inventory, I do not know. My understanding is that inventories are low at this time.

Our powder customers do not ever hold much inventory. If they want to build inventory, they ask us to do it, and for good reason. Shelf life of powder is short compared to most products. This is because it is finely divided and, therefore, subject to oxidation. Customers do not like to keep more than a couple of months supply on hand.

Question: Is this powdered product a standard product; or are there variations in what you sell?

Reply: (Mr. Bogart) We make two grades of powder. Friction grade is a very fine, low density powder. The other is molding grade. Almost every molding customer has his own specifications covering particle size, apparent density, growth, and all sorts of physical characteristics. Most of the production problems have to do with physical characteristics, not chemical. Powder production is still an art, not a science.

Question: Mr. Lincoln has said that he does not think the price of copper will come down as a result of President Nixon's task force on copper. Would he care to speculate as to what that study group will recommend?

Reply: (Mr. Lincoln) I think they have a political hot potato. There is obviously some unfair allocation of copper at the primary producer price. Present allocations are based on patterns of several years ago, and the industry has changed since then. One solution that seems most obvious to everyone is to unpeg the domestic producer price and let it float at world prices. If that happened, the world price would probably come down some and the producer price would go up some. It would solve the problem of allocation of copper, but I wonder what the situation would be with regard to the battle against inflation. The administration would, in effect, have raised the price of copper, and it probably would be a substantial increase. Politically I just don't think they can do that now.

Question: You mentioned in your remarks that you thought there was a possibility that somewhere along the road your plastics business could generate sales of better than \$20 million, roughly as much as you're presently getting from the rest of your business. Does this presuppose that you're getting into other types of plastics business, or does this mean that you anticipate that with the basic technology you

presently have, you have enough of a growth rate to achieve this objective?

Reply: (Mr. Lincoln) This will require a program of acquisition. Our present two plants will not reach \$20 million in sales.

The packaging segment of the plastics industry is growing very rapidly and the untouched markets are very much greater than the markets now being served.

For example, in food packaging, plastics is very rapidly replacing glass and some metal. These are new markets for plastics, beyond the present capacity of the industry to serve them. The opportunities are there and if we are smart, we can capitalize on them.

Question: Will plastic plumbing ever really make it past the quality test?

Reply: (Mr. Lincoln) I think there are two parts to your question. First, is it a good valve and second, can it overcome the negative image that plastics have with respect to brass?

I think it is a good valve. It does not corrode nearly as much as brass. It is pliable, so that the freezing problem is less severe.

We do not have long field experience on plastic valves. Life tests indicate good performance. Plastic is pliable enough so that these valves seal themselves without a washer. Plastic does have the negative image. It doesn't look like a good valve. But it also costs a lot less.

## PROGRAM

Invocation  
Reverend John T. Cain, Pastor  
Bagdad Community Church

Welcome  
George W. Colville, General Manager  
Bagdad Copper Mine

Introductions  
David C. Lincoln, President  
Bagdad Copper Corporation

Chronology  
Robert C. Bogart, Assistant General Manager  
Bagdad Copper Mine

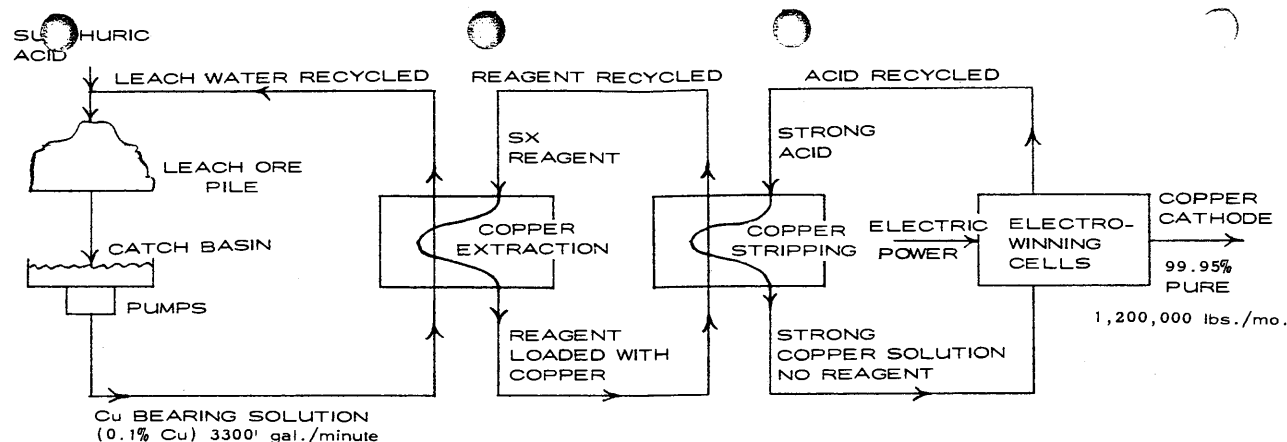
Guest Speakers  
James P. McFarland, Chairman of the Board  
General Mills, Inc.

Morgan Greenwood, President  
Holmes & Narver, Inc.

Dedication Speaker  
Honorable Jack Williams, Governor  
State of Arizona

Announcements  
David C. Lincoln

Benediction  
Reverend John T. Cain



### CATHODE REFINERY

Pilot plant work on the Cathode Refinery began in 1966 when it became apparent that iron used in the former precipitating process was contaminating the copper oxide ore. Construction of the Refinery began in 1969, and it was accepted from Holmes & Narver, the engineering contractor, in August 1970. The solvent extraction portion of the plant uses a reagent manufactured by General Mills which eliminates the need for iron.

Copper recovery begins with sprinkling of weak acid solutions on the copper oxide ore dumps. Acid dissolves copper as it trickles through the ore pile and these copper bearing solutions are pumped to a catch basin. Up to this point the present process is unchanged from that formerly used. In the new process weak copper solutions from the catch basin are mixed with the General Mills' reagent which extracts the copper. The copper-free solution has additional acid added and is recirculated back to the ore to dissolve more copper from the ore pile.

The reagent bearing the copper is then mixed with strong sulphuric acid. Under these conditions, the reagent will give up copper to the sulphuric acid. The reagent is then recirculated to gather more copper. The strong acid-copper solution is sent to the electrowinning portion of the

plant. An electric current is passed through the solution and this deposits copper on a thin copper sheet called a "starter sheet." In about a week the starter sheet grows to approximately 130 pounds of copper. It is then removed and replaced with another starter sheet to repeat the process.

The Refinery will benefit Bagdad in two ways. First cathodes produced are six to seven cents per pound more valuable than the former precipitated copper. Second, and even more important, will be elimination of iron from the leach system, which in turn should greatly extend life of the leaching ore bodies.

The Cathode Refinery cost slightly more than \$5 million. It is the second and largest plant of this type built to date and will produce about 40,000 pounds of copper cathode per day with a purity on the order of 99.95% copper.

The plant operates 24 hours a day, seven days a week, and it takes a total of about 41 people to operate the entire leach system, most of whom are in the Cathode Refinery.

1

1

**MARCONA CORPORATION  
AND SUBSIDIARY COMPANIES**

**CONSOLIDATED STATEMENT OF EARNINGS**

	In Thousands Except Per Share Amounts Year ended December 31		
	1970	1971	1972
	(As adjusted — Note 1)		
Net sales and revenues:			
Iron ore sales.....	\$185,186	\$172,494	\$174,538
Ocean freight revenues.....	40,902	61,569	33,356
Interest and other income.....	1,525	3,779	4,481
	<u>227,613</u>	<u>237,842</u>	<u>212,375</u>
Costs and expenses:			
Cost of iron ore sold (Note 1).....	94,711	98,795	98,005
Cost of transporting iron ore and other products.....	64,610	67,938	53,589
Royalties and export taxes on iron ore shipments.....	11,189	10,109	10,353
Selling, administrative and general expenses.....	5,959	6,834	7,351
Depreciation (Note 4).....	13,918	15,286	16,820
Interest.....	3,371	3,664	3,873
Write down of investment in unconsolidated subsidiary (Note 2).....	2,000		
	<u>195,758</u>	<u>202,626</u>	<u>189,991</u>
	31,855	35,216	22,384
Provision for income taxes (Notes 1 and 6).....	11,258	8,608	2,323
Earnings for the year.....	20,597	26,608	20,061
Retained earnings, beginning of year, as previously reported	124,600	143,437	168,344
Deduct adjustment for the cumulative effect on prior years of applying retroactively the new method of accounting for U. S. income taxes on undistributed earnings of foreign sub- sidiaries (Note 1).....	15,760	20,000	27,500
Retained earnings, beginning of year, as adjusted.....	<u>108,840</u>	<u>123,437</u>	<u>140,844</u>
	129,437	150,045	160,905
Dividends paid:			
Class A-C and A-U stock, \$1 per share in each year; Class B stock, \$6.00 per share in 1970, \$9.20 per share in 1971 and \$10.70 per share in 1972; Class C stock, \$0.05 per share in 1971 and \$0.07 per share in 1972.....	6,000	9,201	10,700
Retained earnings, end of year (Notes 2 and 5).....	<u>\$123,437</u>	<u>\$140,844</u>	<u>\$150,205</u>
Earnings per share of Class B stock.....	<u>\$20.46</u>	<u>\$26.42</u>	<u>\$19.98</u>

**MARCONA CORPORATION  
AND SUBSIDIARY COMPANIES  
CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION**

	In Thousands Year ended December 31		
	1970	1971	1972
	(As adjusted — Note 1)		
Working capital was provided from:			
Earnings for the year.....	\$20,597	\$26,608	\$20,061
Add income charges not affecting working capital:			
Depreciation.....	13,918	15,286	16,820
Write down of investment in unconsolidated subsidiary.....	2,000		
Provision for severance indemnities.....	1,358	1,474	1,530
Deferred income taxes.....	5,124	8,225	(104)
Working capital provided from operations.....	42,997	51,593	38,307
Long-term debt proceeds.....	10,575	34,100	3,900
Long-term receivables collected.....	2,247		
Reduction in payments applicable against future Peruvian income taxes.....	516		2,443
Reduction in other investments and assets.....	688		
	<u>57,023</u>	<u>85,693</u>	<u>44,650</u>
Working capital was used for:			
Additions to plant and equipment, net of retirements.....	23,659	30,854	16,413
Investment in foreign securities.....		22,819	6,591
Reduction in long-term debt.....	10,481	12,068	10,996
Dividends.....	6,000	9,201	10,700
Increase in payments applicable against future Peruvian income taxes.....		519	
Additions to other investments and assets.....		2,347	1,155
Payments of severance indemnities.....	465	471	568
	<u>40,605</u>	<u>78,279</u>	<u>46,423</u>
Increase (decrease) in working capital.....	<u>\$16,418</u>	<u>\$ 7,414</u>	<u>\$(1,773)</u>
<b>Analysis of Changes in Working Capital</b>			
Add increase (deduct decrease) in current assets:			
Cash and short-term securities.....	\$13,013	\$ 8,023	\$ (199)
Accounts receivable.....	391	1,151	1,025
Iron ore inventory and operating materials and supplies.....	(120)	(126)	1,328
Prepaid expenses and costs applicable to voyages in progress....	734	(915)	1,267
	<u>14,018</u>	<u>8,133</u>	<u>3,421</u>
Add decrease (deduct increase) in current liabilities:			
Notes payable to banks.....			(4,000)
Accounts payable and accrued expenses.....	(2,360)	2,800	(2,297)
Income taxes payable.....	(174)	(104)	789
Current portion of long-term debt.....	2,910	(239)	107
Revenues applicable to voyages in progress.....	2,024	(3,176)	207
	<u>2,400</u>	<u>(719)</u>	<u>(5,194)</u>
Increase (decrease) in working capital.....	<u>\$16,418</u>	<u>\$ 7,414</u>	<u>\$(1,773)</u>



**MARCONA CORPORATION  
AND SUBSIDIARY COMPANIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**Note 1 — Summary of accounting policies:**

*Consolidation —*

The accompanying consolidated financial statements include the accounts of the parent company and all significant subsidiaries. Inter-company items and transactions have been eliminated.

*Earnings per share —*

Earnings per share of Class B stock are determined by dividing the portion of consolidated earnings allocated to the Class B stock as determined under the certificate of incorporation by the number of shares of Class B stock outstanding during the year.

*Foreign exchange and currency translation —*

For financial statement purposes, the accounts of subsidiaries which are maintained in foreign currencies are translated into U.S. dollars on the following basis: net current assets at year-end exchange rates; other assets and liabilities at rates in effect when initially recorded; costs and expenses (except depreciation) at the average rates of exchange during the period; and depreciation at the rates existing when the related asset was acquired. Iron ore sales are in U.S. dollars. Gains or losses resulting from changes in currency fluctuations are included in current years' earnings.

*Research and development and exploration costs —*

Research and development costs are charged to expense as incurred. Exploration and pre-development costs incurred in connection with prospective new mining properties are deferred until capitalized as a portion of the investment in mining projects, or if it is determined that the commercial development of the property is not feasible within a reasonably definite period of time, such costs are charged to expense.

*Ocean transportation earnings —*

Shipping subsidiaries recognize earnings generally on a terminated voyage basis under which revenues and costs are deferred until completion of individual voyages.

*Inventories —*

Iron ore inventories are carried at the lower of cost (determined on a first-in, first-out basis) or market. Operating materials and supplies are carried at the lower of average cost or net realizable value.

Inventory amounts used in the computation of cost of iron ore sold were as follows: December 31, 1969 — \$3,930,000; December 31, 1970 — \$3,607,000; December 31, 1971 — \$2,999,000; and December 31, 1972 — \$4,423,000.

*Plant and equipment —*

Plant and equipment is recorded at cost. Depreciation is computed principally by use of the straight-line method based on the estimated useful lives of the assets. Maintenance and repairs are charged against earnings; major renewals and betterments are charged to plant and equipment. The cost and accumulated depreciation of assets sold or retired are removed from the books and any profit or loss resulting from the disposal is credited or charged to earnings.

**MARCONA CORPORATION  
AND SUBSIDIARY COMPANIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**Note 1 — Summary of accounting policies (Continued):**

*Taxes on income —*

In years prior to 1972, no provision was made for U.S. income taxes on undistributed earnings of certain foreign subsidiaries. Opinion No. 23 of the Accounting Principles Board, which became effective for fiscal years beginning after December 31, 1971 states, in part, that there is a presumption that all undistributed earnings of subsidiaries will be transferred to the parent company unless the subsidiaries have invested or will invest the undistributed earnings indefinitely. To comply with Opinion No. 23, as of December 31, 1971 retained earnings were charged with a provision of \$27,500,000 for deferred U.S. income taxes on the undistributed earnings of foreign subsidiaries not then indefinitely invested. Retroactive application of this accounting principle reduces earnings for the years ended December 31, 1971 and 1970 by \$7,500,000 (\$7.50 per share of Class B stock) and \$4,240,000 (\$4.24 per share of Class B stock), respectively. The Board of Directors of Marcona Corporation (hereinafter referred to as "Marcona"), has determined that undistributed earnings of foreign subsidiaries for the year ended December 31, 1972 will be indefinitely invested and, accordingly, no provision has been made for U.S. income taxes on such earnings. The cumulative amount of undistributed foreign subsidiary earnings on which Marcona has not recognized U.S. income taxes is \$77,500,000 at December 31, 1972.

Deferred income taxes also arise as a result of differences in the treatment of depreciation for tax and financial reporting purposes, chiefly in Peru, and certain prepayments of Peruvian income taxes.

**Note 2 — Ownership and operations:**

Marcona is owned principally by Utah International Inc. and Cyprus Mines Corporation. Significant subsidiary companies, all of which carry out the major portion of their operations outside the United States, are Marcona Mining Company, Cia San Juan, S.A., Marcona Carriers, Ltd. and Marcona (N.Z.) Company. Marcona Mining Company is engaged in the mining and processing of iron ore in Peru (see Note 3). Cia San Juan, S.A., a Panamanian corporation, is engaged in the sale of iron ore produced by Marcona Mining Company and others, and both it and Marcona Carriers, Ltd., a Liberian corporation, are engaged in the transportation of iron ore, principally Marcona ore, and other bulk products. Marcona (N.Z.) Company, through its 75% ownership of Waipipi Iron Sands Limited, is engaged in mining and beneficiating an iron sands deposit in New Zealand.

Substantially all of Marcona's assets and liabilities except for long-term debt of \$18,000,000 and substantially all earnings for the three years ended December 31, 1972, and retained earnings at December 31, 1972, related to subsidiaries conducting operations outside the United States. It is not anticipated that currency restrictions or other government regulations of the countries in which Marcona's subsidiaries do business will have any significant effect on the availability for remittance to the United States of the portion of these funds not indefinitely invested.

During 1970 an unconsolidated subsidiary company engaged in salt mining in Chile substantially suspended operations because of market conditions and Marcona wrote down its investment in the subsidiary to realizable value.

**Note 3 — Marcona Mining Company — Peruvian branch operations:**

(a) Marcona Mining Company operates under a mining concession agreement with Corporacion Peruana del Santa (Santa), an agency of the Government of Peru, extending to November 1982, and under separate beneficiation concessions granted directly by the Peruvian government. The agreement with Santa provides Santa with an option for participation in continued beneficiation operations beyond 1982 on a partnership basis with the Company. By decree law announced on February 14, 1973,

**CAN-EX***Socorro (f)*

CAN-EX RESOURCES LTD.  
BOX 12542, OCEANIC PLAZA  
2580 - 1066 W. HASTINGS ST.  
VANCOUVER, B.C. V6E 3X2  
TEL: (604) 682-2269

PRESIDENT'S LETTER TO SHAREHOLDERS

1987 proved a significant year for the company. Five of Can-Ex's gold properties in S.W. Arizona have been optioned to Billiton Minerals (U.S.A.), Inc., who are currently active in the exploration of these properties. In addition, the company has secured an option to purchase the Socorro Reef Gold Mine and surrounding area. Initial sampling and geologic results have indicated the presence of a large and rich gold and silver bearing formation. Exploration of this area is continuing.

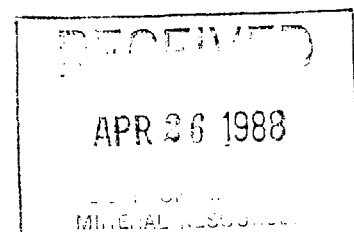
The company has ample funds to conduct its programs. 1988 promises to be an exciting and rewarding year for Can-Ex.

On Behalf of the Board  
CAN-EX RESOURCES LTD.



G.L. Anselmo, B.A.  
President

April 12, 1988



NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

1. MINERAL PROPERTIES AND DEVELOPMENT (Continued)

(a) Mineral claims and options (Continued)

Arizona properties (Continued)

Socorro Reef property

This gold property, acquired during 1987, consists of 58 unpatented mineral claims located in La Paz County, Arizona, U.S.A., comprising the White Eagle #1 - #12, Reef #3 - #22, Reef #44, #46, #48, #50, #53, #55, #57, #59, #61, #63, #65, #67, #69, #71, Iron Door #1 - #6, Tres Padres #1, Henry Bell #1, Palo Verde #1, Yellow Gold #1 and Blue Bird #1 and #2. The property is situated approximately 6 kilometres south of Salome, Arizona.

British Columbia properties

American Boy property

The Company is the sole beneficial owner of 25 contiguous mineral claims located in the Omineca Mining Division of the Province of British Columbia, comprising the Janelle, Cindy Lou, Roosevelt Recovery, Silver Bell, AB-1 through AB-8, AB-13 through AB-21, AB-23, AB-24, Cassiar Swift Water and Cassiar Clear Water claims. The property is situated in central British Columbia 10 kilometres northeast of Hazelton, B.C.

Mohawk property

This property consists of four mineral claims known as the Mohawk, Bunker Hill, F.N. Fraction and Lucky Jim claims which adjoin the American Boy property. The claims are located 3 kilometres northeast of New Hazelton, B.C., in the Omineca Mining Division of the Province of British Columbia.

Under the terms of option agreements, the Company is committed to make minimum expenditures on the properties and to make option payments to a maximum aggregate amount for each property to maintain the properties in good standing. The Company may abandon its interests and cease to make payments at any time.

## CAN-EX RESOURCES LTD.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## 1. MINERAL PROPERTIES AND DEVELOPMENT (Continued)

## (a) Mineral claims and options (Continued)

	Annual fixed payment <u>U.S. \$</u>	Annual contingent payment <u>U.S. \$</u>	Aggregate payment <u>U.S. \$</u>
Arizona properties			
Gold Crown prospect	\$ 3,600	7.5% of net	\$ 50,000
Pump prospect	3,600	smelter returns in excess of \$3,600	50,000
Overshot prospect	12,000	7.5% of net smelter	1,000,000
Gold Hill West prospect	12,000	returns in excess of \$12,000	1,000,000
Big Horn property			
Mollie D parcel	6,000	7% of net smelter returns in excess of \$6,000	500,000
El Tigre parcel	-	15% of net profits	3,000,000
		Royalty of 2% of net profits subsequent to payment of aggregate amount	
Knabe parcel	-	15% of net profits	2,000,000
		Royalty of 2% of net profits subsequent to payment of aggregate amount	
Socorro Reef property	42,000	5% of net smelter returns	5,500,000
	<u>\$79,200</u>		

The Company has also agreed to issue up to 75,000 shares of the Company to the optionors of the Knabe parcel (see note 3(i)).

TC. FROM 2-24-79  
Sued Johnson  
Vice President  
University of New Mexico  
Albuquerque N.Mex.  
87131

Dr. George W. Cochran  
V.P. & Chairman of  
Board - Jordan  
Industries -

wants free office space  
In turn will donate  
percent of profits to  
Community Library

## OUT OF BAGDAD'S YESTERDAYS

## — BAGDAD TIMES —

"PRIDE O' THE PRESS"

G.W. Colville - Editor  
Also Columnist & Flunkey

Tues. Feb 27, 1945

Vol. 1 - No 8  
Metro Edition

## ARMED FORCES LUMINARIES IN CAMP!!!

## BOY INJURED IN FALL

7 year old Virgil Hundley was injured to the extent of a broken arm when he inadvertently fell into the Bagdad Natatorium which is now devoid of water. Hurry and get well Virgil.

## YUM YUM YUM.

There will be a pot luck dinner Mar. 1st. 6 P.M. at The Bagdad Arms Apartments Community Hall. See notice in Post Office for details.

## — THE SOCIAL WHIRL — (C)

Our Genial General manager's family spent last week in camp.

E.G. Sharpnack, or "Sharpie" as he is affectionately known, reports spending a rousing weekend at Congress Jct. & vicinity.

Mr. E.A. Girard, world renowned construction supervisor is directing the building of moorings for the compressor recently acquired from the Boriana.

Messrs. T. Lane and G. Gallagher, prominent RFC engineers were in camp last week.

Two new motors have arrived for the haulage of choice muck. This should lighten the load on the interminable Green Hornet.

COMING  
ATTRACTIONS

THE BAGDAD O.O.

MAR. 3-4 "LAURA"

MAR. 6-7 "CHEROKEE STRIP"

MAR. 10-11 "Something for the Boys"

MAR. 13-14 "OMAHA TRAIL"

— Also Super Shorts —

Two boys who are in our fighting forces are now in camp on furlough or leave. Kenneth J. Worthington, son of V.D. Worthington is here on a 30 day leave. Kenny is a Petty Officer in the Navy and is just back from 18 months in the south Pacific.

Our old friend Bob Begart has rejoined his family here on his furlough from a camp in the southeast. Bob could not be reached for a statement before press time because of pressing social engagements.

The Times wishes the best of luck to you boys, and may you return for a permanent stay in the near future.

Mr. J.D. Weaver has left for Mancos, Colo. He has just been informed of the loss of his brother, Sgt. C.T. Weaver who was with the 32nd. Div. in Belgium. Our sincerest sympathy is extended.

## VITAL STATISTICS (Unflin. Business)

The M.H. Parra heir weighed in at 6 and 3/4 lbs. on Feb. 5 and was named Manuel H. Jr.

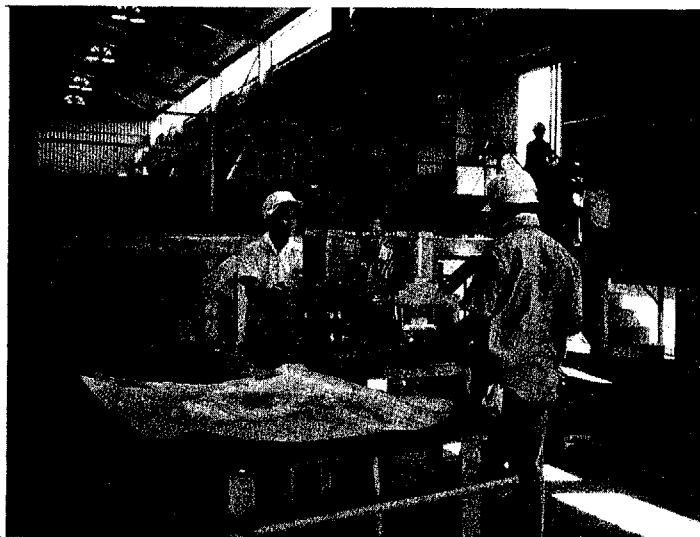
## : BUSINESS ANNOUNCEMENTS :

The OUT WICKENBURG WAY laundry and dry cleaning service is anticipating every week service on Tuesdays. Leave them rags at Bill Hibberd's for a super do of washing or cleaning.

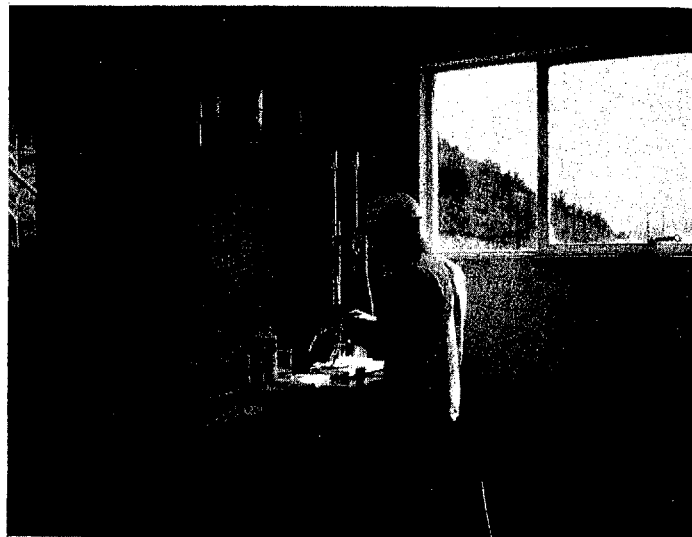
BRAYTONS.  
"Bagdad's most  
Complete Mart."  
Our prices will  
astound you!

YOU TOO, Can  
afford a delightful  
dinner in elegant  
Surroundings AT-  
— ANDERSONS —

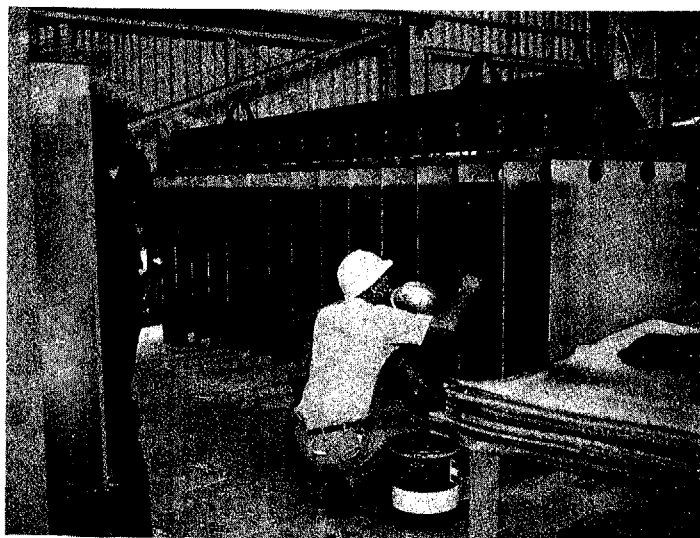
## *New Plant — contd. . . . .*



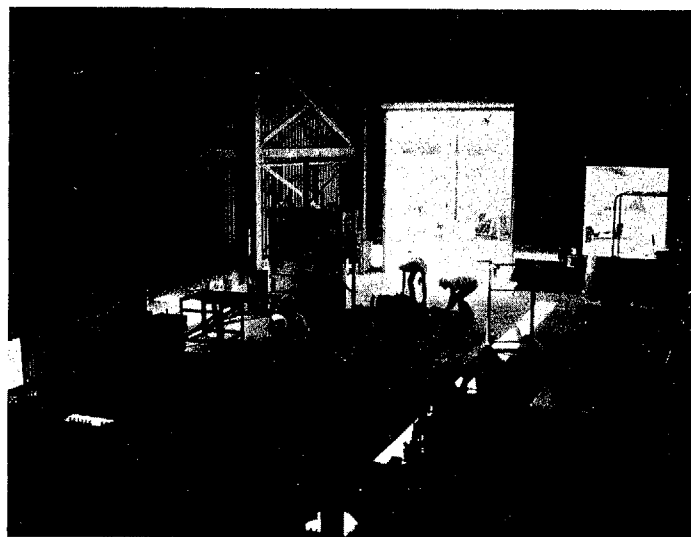
Loop machine that fastens copper hanger straps to the starter sheets.



A corner of the laboratory at the new plant.



Preparing stainless steel starter sheet blanks.



Viewed from the tankhouse floor, the copper scrap baler can be seen in the left foreground.





### NEW CLASSROOMS DONATED

At the beginning of the present school term some of the Bagdad students moved into new, modern quarters. These classrooms were donated by Bagdad Copper Corporation and Cyprus Mines Corporation to Bagdad School District No. 20. The construction cost was approximately \$51,000, shared by each corporation on the basis of the number of employees' students attending the Bagdad School System.

The building was constructed by Certified Building System, Inc. of Phoenix, Arizona.

This donation is indicative of the continued cooperation with the Bagdad School System and interest in the community by these two mines.

\* \* \*

A pretty young lady presented a check at a bank for cashing. The teller examined it, then asked, "Can you identify yourself?"

Looking puzzled, the girl dipped into her handbag and pulled out a small mirror.

She glanced in it for a moment and smiled. "Yes, it's me all right."

### TIRE LOSS DUE TO ROCK CUTS

August, 1970 .....	\$3,051.88
August, 1969 .....	\$ 956.96
August, 1968 .....	\$ 830.50
Monthly Average — 1969 .....	\$ 971.91
Monthly Average — 1970 to date .....	\$1,268.92

A young mother, after putting her two children to bed one night, changed into a droopy blouse and an old pair of slacks and proceeded to wash her hair. All during the shampoo she could hear the children growing wilder and noisier. Finishing as hurriedly as possible, she wrapped a large towel around her head, stormed into their room and put them back to bed with a stern warning to stay there. As she left, she heard her two-year-old say to his brother in a trembling voice: "Who was that?"

\* \* \*

A film producer said to a young author:

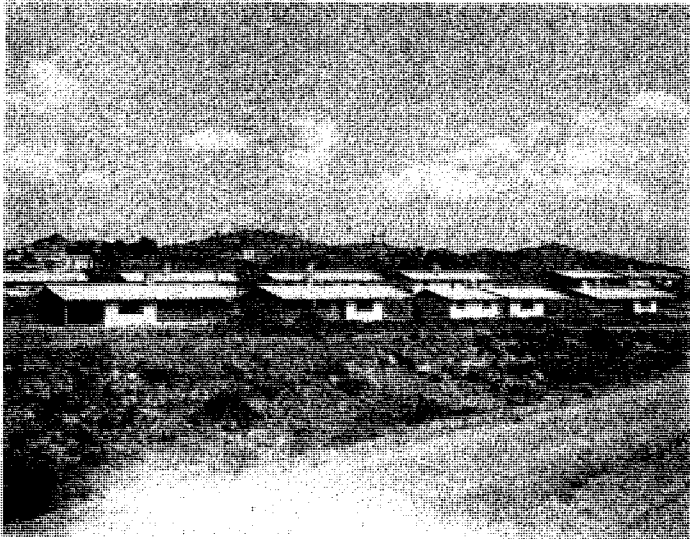
"Well, in general your screenplay is not bad. However, certain dialogues should be clarified so that any idiot can understand them."

"Yes, sir," nodded the young man. "And what scenes did you find unclear?"

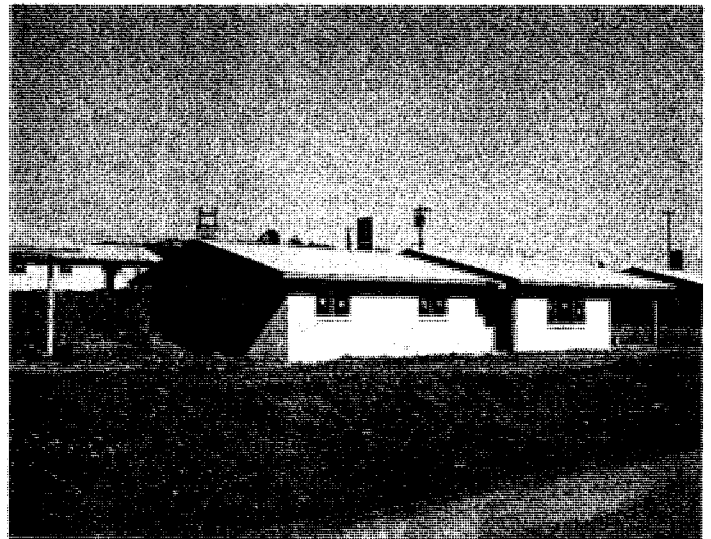
A woman driver whose parked car rolled into another was questioned by a policeman. "Why didn't you set your emergency brake?"

"Emergency?" she asked. "Since when is mailing a letter an emergency?"

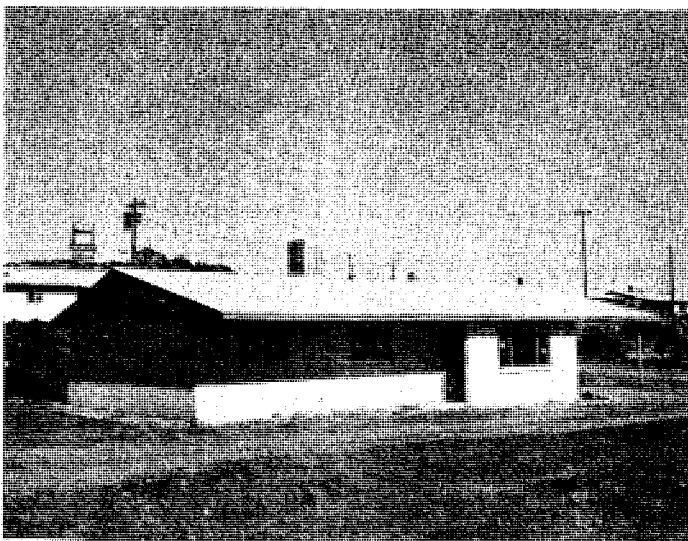
## ***New Housing At Bagdad . . .***



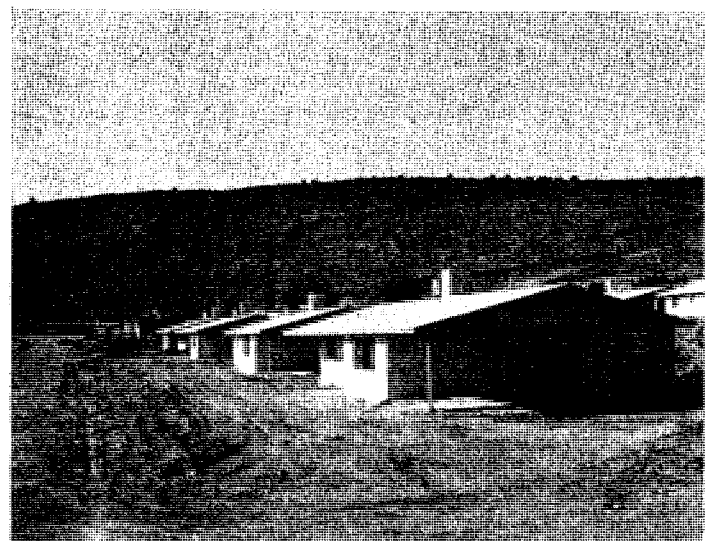
These are some of the twenty-five new houses built by Bagdad for its employees. It is hoped that they will alleviate our housing shortage.



This is one of the 4-bedroom houses, with the carport on the right. The 4-bedroom houses measure 1,444 square feet of floor space, plus the carport.



The 3-bedroom houses measure 1,276 square feet of floor space, plus carport. There are fifteen 3-bedroom and 10 of the 4-bedroom models.



This is the view on Mercy Drive looking toward the Hospital. The first house will be ready for occupancy approximately October 1. The remainder will be ready over the next six to eight weeks.



## LEACH SOLUTIONS

As everyone in Bagdad is probably aware, the solvent extraction, electrowinning plant is complete and in operation. Holmes & Narver, Inc. completed and turned over the entire plant to Bagdad personnel on August 12, 1970.

The ultimate purpose of this plant is to produce a cathode of copper pure enough to be manufactured directly into wire or tubing. It replaces the precipitate copper which had to be shipped to a smelter for further refining in order to achieve an equivalent purity of approximately 99.95%.

In the precipitate operation, 7 to 8 grams per liter of sulphuric acid solution was sprinkled on the leach dumps (see photo #1). This was allowed to percolate through, thereby leaching copper from the ore, and gathered at Alum and Copper Creek Dams. From there it was pumped to the surge pond, which feeds the precipitators.

This copper-bearing solution was passed through shredded tin cans, which precipitated the copper. These precipitates (approximately 83% Cu) were then solar dried and shipped to a smelter or to Bagdad's copper powder refinery for further purification.

In our present operation the leaching cycle is identical, as outlined above, up to the surge pond. From there on it's a new ball game.

Copper-bearing solution from the surge pond is fed to the extractor section of the solvent extraction plant (see photo #2). The copper is extracted by a counterflow of 7.5% LIX 64 N, manufactured by General Mills, which we will now call loaded organic. This loaded organic reports to a surge tank, from which it is pumped to the stripper section, where it is met with a counterflow of strip solution containing 200 grams per liter of acid. This strips the copper from the loaded organic, and is now called stripped organic. The stripped organic is returned to the extractor section, which closes the loop.

Strip solution that has contacted loaded organic is concentrated to 50 grams per liter of copper and is sent to a surge tank. It is pumped from there to the electrowinning section. At this point, 25 grams per liter of copper are removed by electrowinning (see photo #3). This solution is then pumped back to the stripper section, closing this loop.

Copper that has been produced by electrowinning is bundled in lots of approximately 6,000 to 7,000 pounds, and is ready to be shipped to a manufacturer of wire bar or tubing (see photo #4).

In photo #5 we see the control board by which the plant is operated. From this central point an operator can determine any given temperature, flow or power applied to the process.

The plant was designed to produce 40,000 pounds of cathode copper per day. From August 17 through September 1 it produced an average of 25,921 pounds per day. From September 1 through September 11 it produced an average of 32,609 pounds per day. It is expected that by September 15 the plant will be producing slightly over 40,000 pounds of cathode copper daily.



Photo #1 — Leach Dump

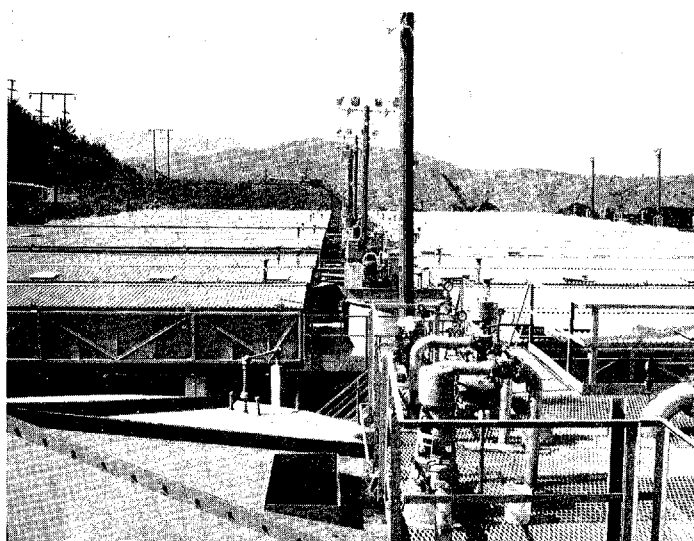
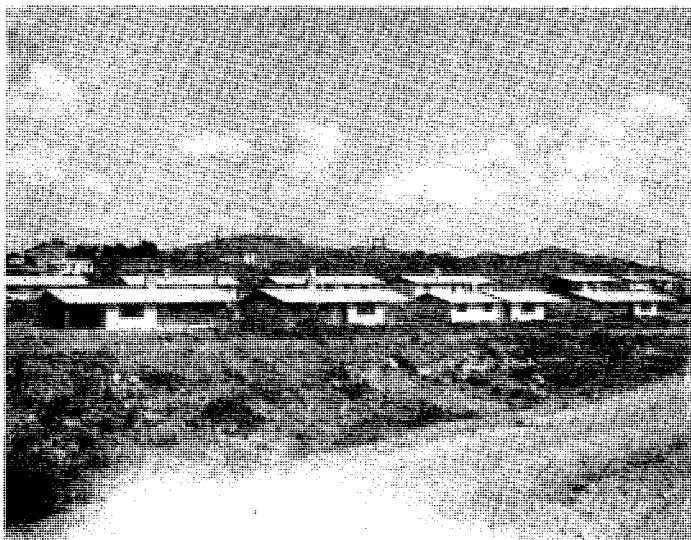


Photo #2 — Solvent Extraction Section

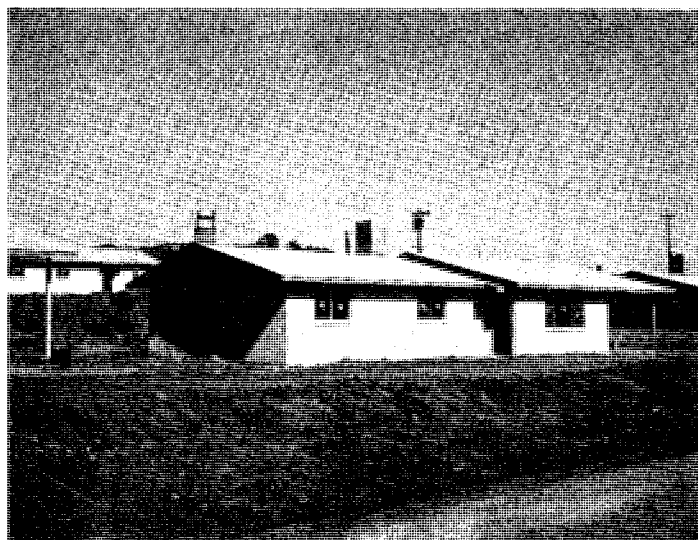


Photo #3 — Electrowinning Building

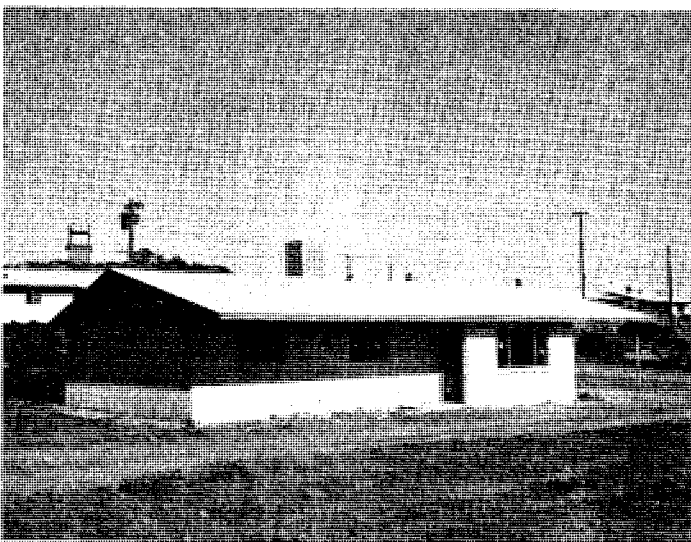
## ***New Housing At Bagdad . . .***



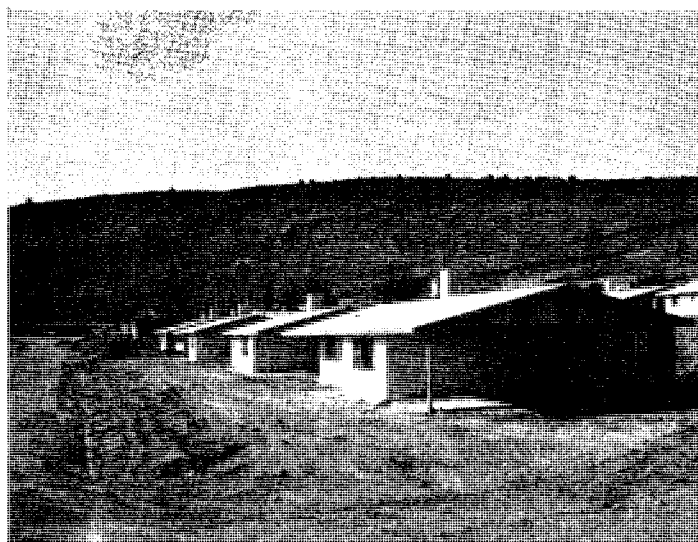
These are some of the twenty-five new houses built by Bagdad for its employees. It is hoped that they will alleviate our housing shortage.



This is one of the 4-bedroom houses, with the carport on the right. The 4-bedroom houses measure 1,444 square feet of floor space, plus the carport.



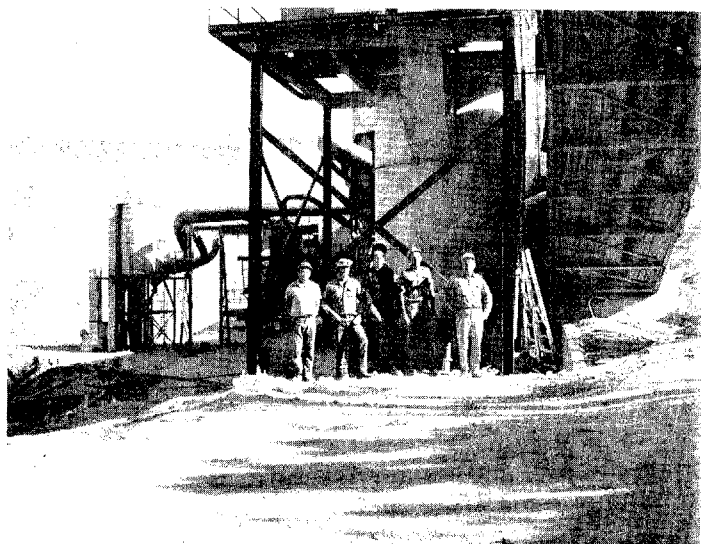
The 3-bedroom houses measure 1,276 square feet of floor space, plus carport. There are fifteen 3-bedroom and 10 of the 4-bedroom models.



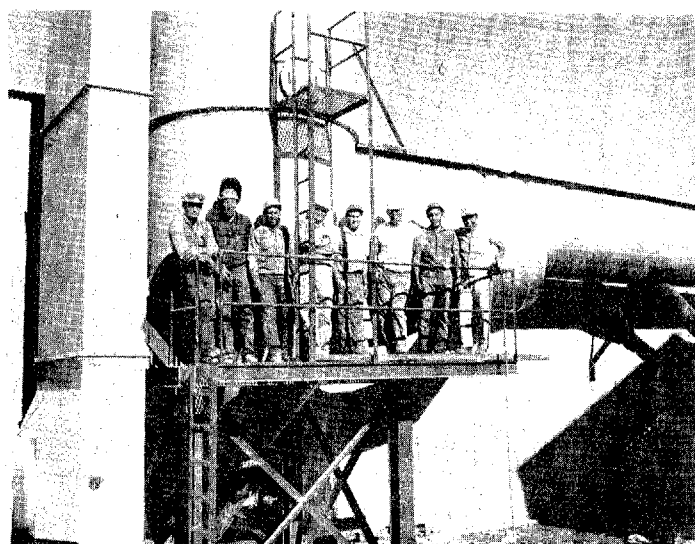
This is the view on Mercy Drive looking toward the Hospital. The first house will be ready for occupancy approximately October 1. The remainder will be ready over the next six to eight weeks.



## Mill Memos — contd . . .



Jack Williams, Gary Stalcup, Charles McMurry, Virgil Heard and Al Smith are shown in front of the Size 120 machine.



(Left-to-right) Gary Stalcup, Charles McMurry, Bob Manifee, Al Smith, Jack Williams, Norman Bennett, Virgil Heard and Charlie Lucero, mill mechanics who worked on the installations of our new dust collectors.

## Leach Solutions — contd . . .



Photo #4 — Copper Cathodes ready for shipment

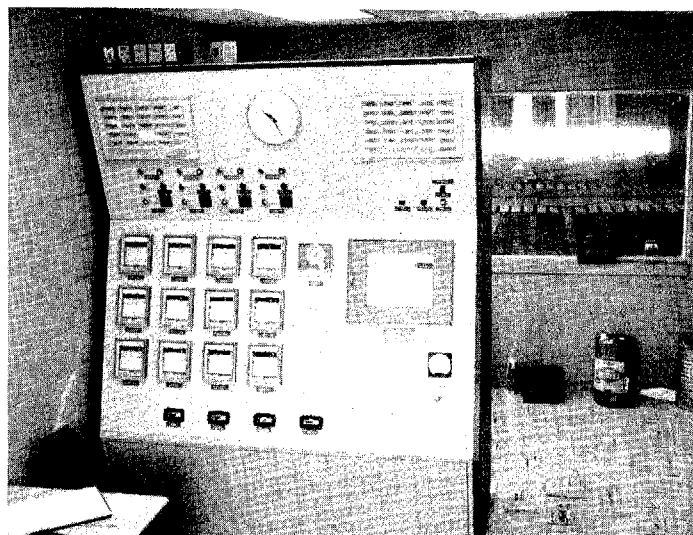
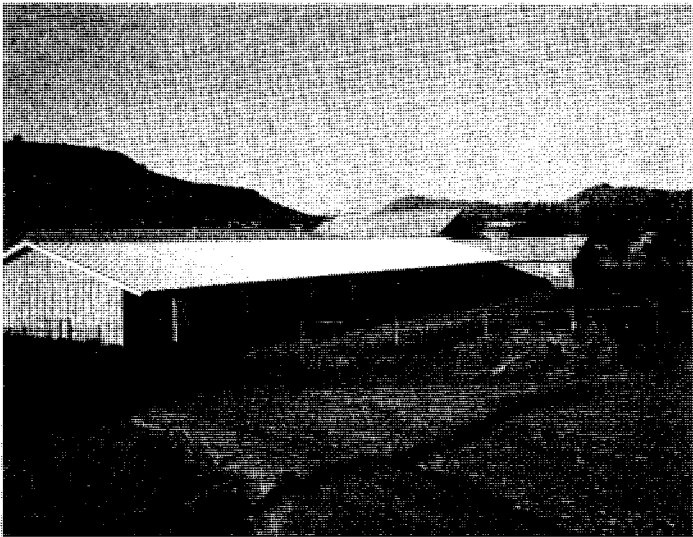


Photo #5 — Control Board



### NEW CLASSROOMS DONATED

At the beginning of the present school term some of the Bagdad students moved into new, modern quarters. These classrooms were donated by Bagdad Copper Corporation and Cyprus Mines Corporation to Bagdad School District No. 20. The construction cost was approximately \$51,000, shared by each corporation on the basis of the number of employees' students attending the Bagdad School System.

The building was constructed by Certified Building System, Inc. of Phoenix, Arizona.

This donation is indicative of the continued cooperation with the Bagdad School System and interest in the community by these two mines.

\* \* \*

A pretty young lady presented a check at a bank for cashing. The teller examined it, then asked, "Can you identify yourself?"

Looking puzzled, the girl dipped into her handbag and pulled out a small mirror.

She glanced in it for a moment and smiled. "Yes, it's me all right."

### TIRE LOSS DUE TO ROCK CUTS

August, 1970 .....	\$3,051.88
August, 1969 .....	\$ 956.96
August, 1968 .....	\$ 830.50
Monthly Average — 1969 .....	\$ 971.91
Monthly Average — 1970 to date .....	\$1,268.92

A young mother, after putting her two children to bed one night, changed into a droopy blouse and an old pair of slacks and proceeded to wash her hair. All during the shampoo she could hear the children growing wilder and noisier. Finishing as hurriedly as possible, she wrapped a large towel around her head, stormed into their room and put them back to bed with a stern warning to stay there. As she left, she heard her two-year-old say to his brother in a trembling voice: "Who was that?"

\* \* \*

A film producer said to a young author:

"Well, in general your screenplay is not bad. However, certain dialogues should be clarified so that any idiot can understand them."

"Yes, sir," nodded the young man. "And what scenes did you find unclear?"

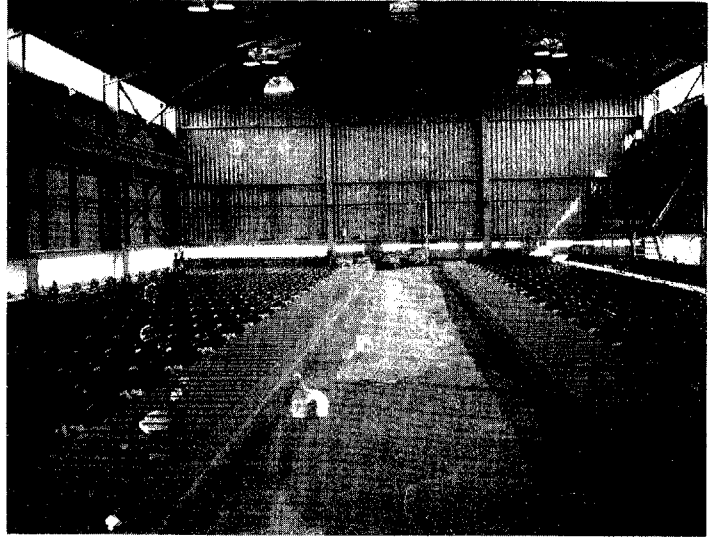
A woman driver whose parked car rolled into another was questioned by a policeman. "Why didn't you set your emergency brake?"

"Emergency?" she asked. "Since when is mailing a letter an emergency?"

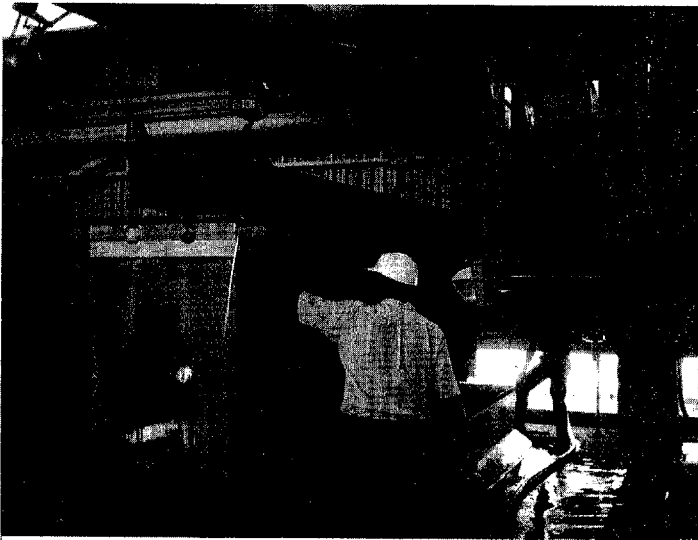
## *The New Cathode Refinery Is In Operation . . .*



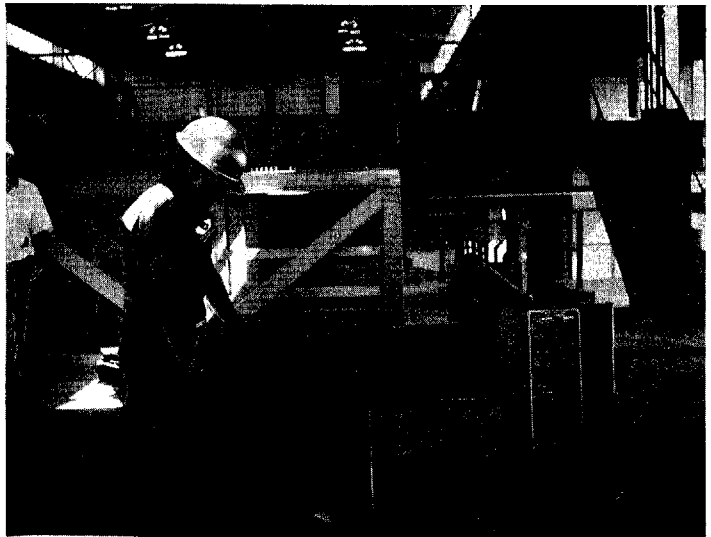
The occasion for these big smiles is Bagdad's first copper starter sheet produced August 13, 1970.



This is a view the center aisle of the Tankhouse.



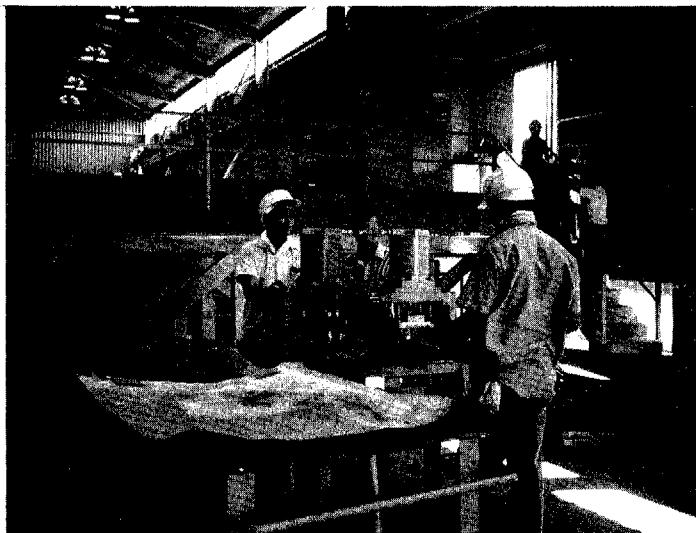
Washing starter sheets.



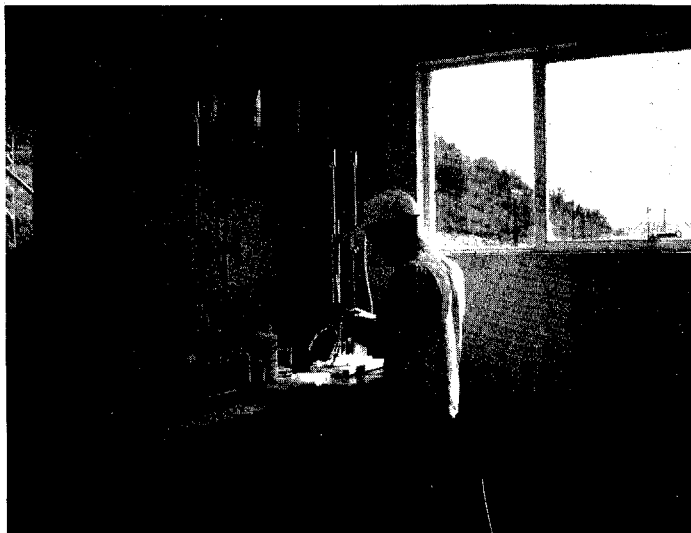
Shear for cutting loops to be attached to copper starter sheets.



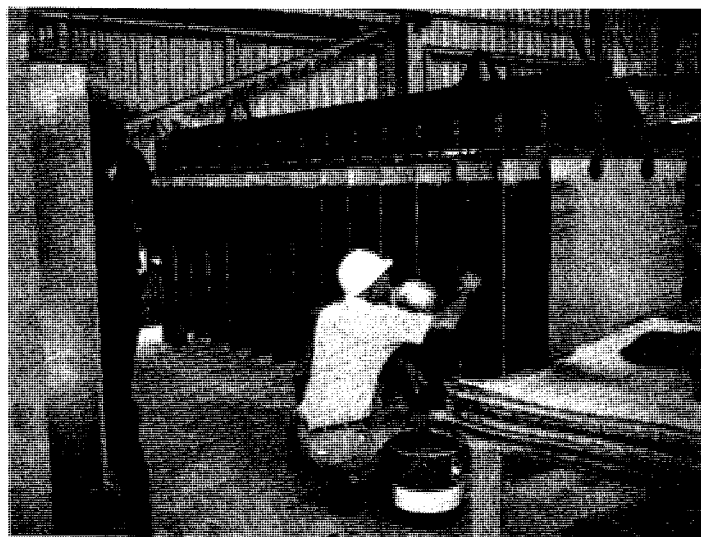
## ***New Plant — contd. . . .***



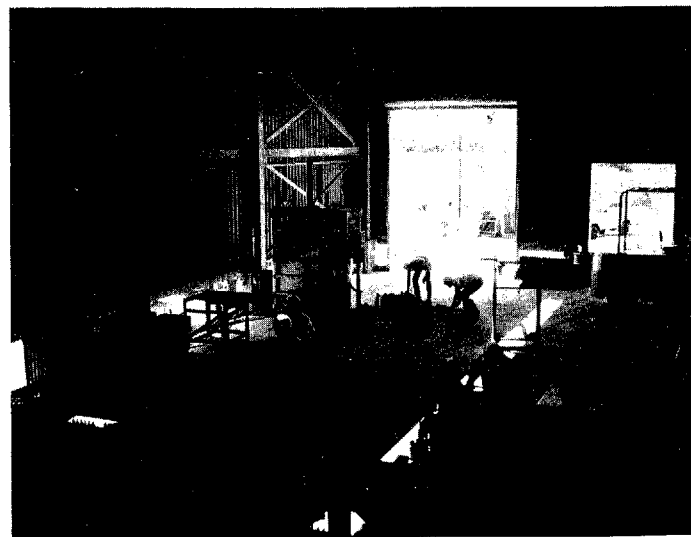
Loop machine that fastens copper hanger straps to the starter sheets.



A corner of the laboratory at the new plant.

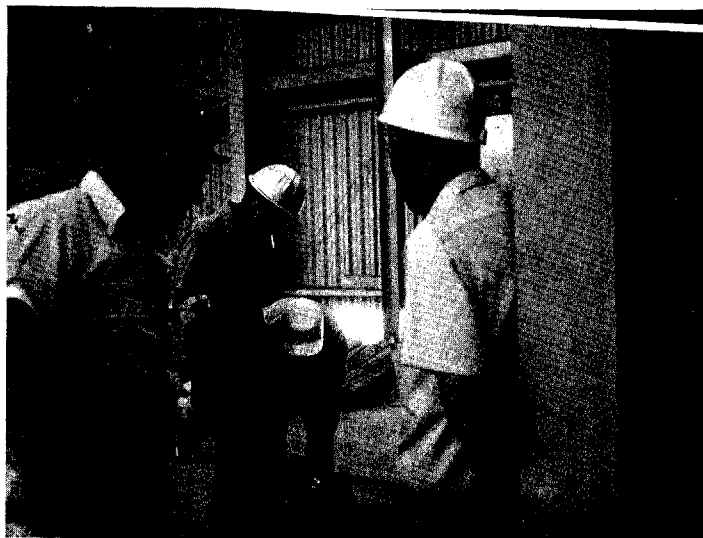
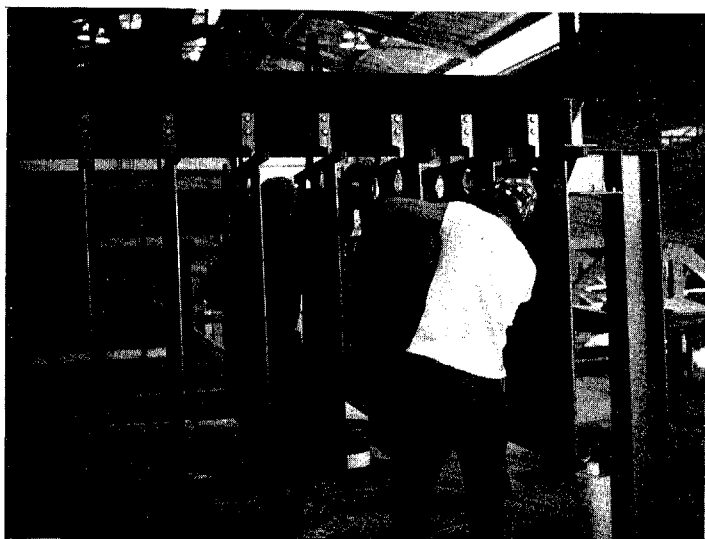
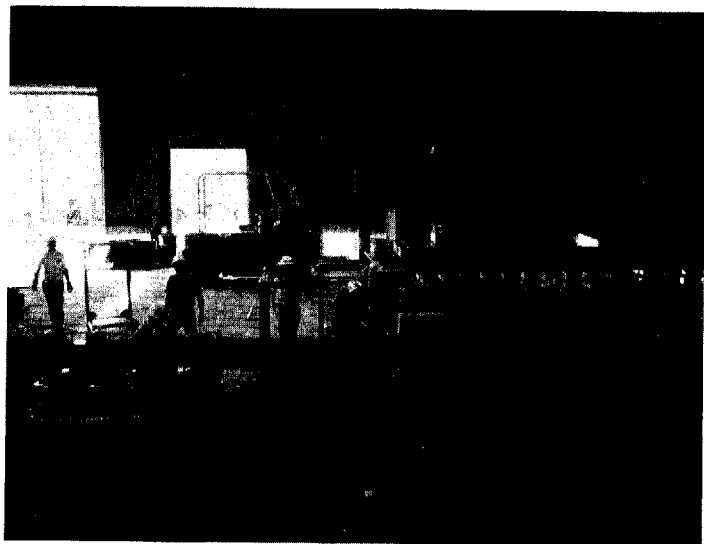


Preparing stainless steel starter sheet blanks.



Viewed from the tankhouse floor, the copper scrap baler can be seen in the left foreground.

# *New Plant — contd. . . . .*



OUT OF BAGDAD'S YESTERDAYS

# ← BAGDAD TIMES →

"PRIDE O' THE PRESS"

G.W. Colville - Editor  
Also Columnist & Flunkey

Tues. Feb 27, 1945

Vol. 1 - No 8  
Metro Edition

## ARMED FORCES LUMINARIES IN CAMP!!!

### BOY INJURED IN FALL

7 year old Virgil Hundley was injured to the extent of a broken arm when he inadvertently fell into the Bagdad Natatorium which is now devoid of water. Hurry and get well Virgil.

### YUM YUM YUM.

There will be a pot luck dinner Mar. 1st. 6 P.M. at The Bagdad Arms Apartments Community Hall. See notice in Post Office for details.

### — THE SOCIAL WHIRL —

Our Genial General manager's family spent last week in camp.

E.G. Sharpnack, or "Sharpie" as he is affectionately known, reports spending a rousing week end at Congress Jct. & vicinity.

Mr. E.A. Girard, world renowned construction supervisor is directing the building of moorings for the compressor recently aquired from the Borianna.

Messrs. T. Lane and G. Gallagher, prominent RFC engineers were in camp last week.

Two new motors have arrived for the haulage of choice muck. This should lighten the load on the interminable Green Hornet.

Two boys who are in our fighting forces are now in camp on furlough or leave. Kenneth J. Worthington, son of V.D. Worthington is here on a 30 day leave. Kenny is a Petty Officer in the Navy and is just back from 18 months in the south Pacific.

Our old friend Bob Begart has rejoined his family here on his furlough from a camp in the south east. Bob could not be reached for a statement before press time because of pressing social engagements.

The Times wishes the best of luck to you boys, and may you return for a permanent stay in the near future.

Mr. J.D. Weaver has left for Mancos, Colo. He has just been informed of the loss of his brother, Sgt. C.T. Weaver who was with the 32nd. Div. in Belgium. Our sincerest sympathy is extended.

### VITAL STATISTICS (Unfiled Business)

The M.H. Parra heir weighed in at 6 and 3/4 lbs. on Feb. 5 and was named Manuel H. Jr.

### • : BUSINESS ANNOUNCEMENTS : •

The OUT WICKENBURG WAY laundry and dry cleaning service is anticipating every week service on Tuesdays. Leave them rags at Bill Hibberd's for a super do of washing or cleaning.

BRAYTONS.  
"Bagdad's most  
Complete Mart."  
Our prices will  
astound you!

YOU TOO, Can  
afford a delightful  
dinner in elegant  
Surroundings AT-  
-ANDERSONS-

© COMING  
ATTRACTIONS  
THE BAGDAD • 00  
MAR. 3-4 "LAURA"  
MAR. 6-7 "CHEROKEE STRIP"  
MAR. 10-11 "Something for the Boys"  
MAR. 13-14 "OMAHA TRAIL"  
— Also Super Shorts —