

5200

5000

4800

ESCALANTE MINE

4600

# Ranchers



**ANNUAL REPORT**

**Year Ending June 30, 1980**

## The Escalante—An Old New Mine

The Escalante silver deposit, where the Company is working at full speed to develop a new mine, has been around a long, long time. The vein, whose outline appears on the cover of the Annual Report, probably dates back to Tertiary time some 20 million years ago when hot mineral-bearing fluids and gases began migrating into fractures in existing volcanic rock in what is now extreme southwest Utah. It was an activity that was to continue for several hundred millenia.

Ultimately this depositional activity ceased, leaving a vein, primarily of quartz, frozen amid the barren volcanic tuff. Scattered through this structure were native silver, silver chloride and silver sulphide, along with minor amounts of lead, zinc, and copper. Erosion — proceeding at the rate of perhaps an inch every 500 years — gradually exposed the vein, and today it can be seen cutting through the brown rock of the countryside, a ribbon some 6,000 feet long and five to 30 feet wide.

It was on this distinctive outcrop that one Heber Holt filed the first claims in 1896. Nothing much came of his efforts, for the Escalante was to be one of those frustrating mineral deposits, not uncommon in the mining business, which was discovered before its time. Its ore could not be profitably mined for the prevailing silver price of about \$.50 per ounce. Holt's discovery was a geologic success, but it was another science — the dismal science of economics — that was ultimately to dictate the Escalante's development.

Part of the difficulty with the deposit was the classic nature of its deposition. From an underlying source, the mineral-bearing fluid was forced upward into fissures, where it cooled and solidified, forming a nearly vertical vein which later separated into two offsetting segments, giving the deposit a shingled configuration. As the vein was exposed by erosion, the minerals were leached out and slowly trickled into the ground to be re-deposited at a lower level. Over thousands of years this action gradually built-up an enriched zone — supergene enrichment, the geologists call it — some 200 feet underground. This 400-foot section of the vein, containing 12 to 18 ounces of silver per ton, is sandwiched between the slightly depleted top zone, bearing five to eight ounces of silver per ton, and the underlying primary zone, containing approximately four ounces of silver per ton.

The difficulty with this arrangement — and the one which combined with historic low prices of silver to delay development of the Escalante for nearly 85 years — is that the enriched zone lies almost entirely below the water table. And there is a prolific supply

### THE COVER

*Although abstract in appearance, the colorful Annual Report cover by artist Gene Garriott is actually a precise drawing of cross sections (in blue) of the silver-bearing vein at the Escalante Mine as deduced from ore intercepts in drill holes. The viewer can imagine that he is standing at the end of the vein, looking slightly upward along its axis from a point about 400 feet underground. The cross sections show only the outline of the deposit at 24 points over a distance of approximately 3000 feet; no attempt has been made in the drawing to link the sections into a continuous vein. The black lines intersecting the vein from the surface are drill holes, with red intercepts indicating high grade ore, green medium grade and black lower grade.*

of underground water in the area — sufficient that pumps will ultimately have to operate at the rate of 40,000 gallons per minute as mining proceeds below the water table.

The relatively low grade of the first 200 feet of vein and the high flow of water below that have kept miners from any meaningful production, although in 1929 some 350 feet of drifting — tunneling — was done, and in 1934 a 25-ton-per-day pilot plant was built and 150 tons of ore were mined. Various sporadic mining attempts followed, but it was not until 1958, when the property was obtained by mining engineer Sam Arentz that a systematic development program was initiated.

Arentz and a succession of partners, including several major mining companies, drilled the property extensively, conducted pumping tests, and on one occasion, in 1966, mined some 20,000 tons of ore. Ranchers, intrigued by the proven reserves, which by then totaled about 18 million ounces of silver, drilled three holes on the property in 1970, but went no further because the price of silver, then \$1.75 per ounce, would not sustain an economic operation.

But the Company returned to the property in 1975, signing another option with Arentz. The outlook for silver was changing, the Company felt. Perhaps it was the Arab boycott of 1973-74 or perhaps the fact that the U.S. economy began to show signs of persistent inflation. In any event, the price of silver began to rise, reaching the \$8 per ounce level in mid-1979 when the Company completed its studies of the property and decided to begin a trial mining program. Prices have since moved even higher, triggering full-scale mine development. Economics has thus done — or is about to do — what Heber Holt's efforts were unable to do — bring the 20-million-year-old Escalante property into full production, either in late 1981 or early in 1982.

# Financial Highlights

	1980	1979	1978	1977	1976
Total assets	\$32,361,083	\$39,497,054	\$39,444,396	\$21,160,980	\$16,177,561
Total liabilities	7,102,353	6,028,542	3,606,906	2,880,719	1,675,673
Total equity	2,300,000	1,700,000	1,730,000	820,000	600,000
Common shares	353	431,842	1,916,956	1,490,210	977,242
Preferred shares			1.36	52	35
Retained earnings					1,267,402
Operating income	12,145,098	13,485,606	4,865,063	4,572,787	4,285,595
Net income	47,285,085	40,031,396	37,275,493	32,305,531	27,540,905
Dividends	1,144	10,022	8,557	7,221	6,690
Operating expenses					300
Net income available to common shareholders					
Per common share					
Operating income				1,261,947	1,225,504
Net income					
Dividends					
Net income available to common shareholders					
Per common share					

## Ranchers

EXPLORATION & DEVELOPMENT CORPORATION

## ANNUAL REPORT

Year Ending June 30, 1980

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Ranchers Exploration & Development Corporation  
 American Stock Exchange  
 Principal office: 40 Wall Street, New York, New York 10015  
 The Company had 300,000 shares of common stock outstanding as of June 30, 1980.

Both years have been adjusted to reflect a 2 for 1 stock split effected in February, 1980 in the firm of a 100 percent stock dividend. Cash dividends were resumed in the third quarter of the 1979 fiscal year ending June 30, 1979, and in the 1980 fiscal year were paid at the rate of \$0.05 (restated) per common share in the first two quarters and at the rate of \$0.0625 per share in the second two quarters. The Company expects to continue dividends at this level, reserving most of its earnings to finance the further growth of the Company.

Transfer Agent and Registrar: Republic National Bank of Dallas, Corporate Trust Department, Dallas, Texas 75221  
 Manufacturers Hanover Trust Company, Corporate Trust Department, 40 Wall Street, New York, New York 10015  
 Additional information about the Company may be obtained from: Leland C. Enblin, Senior Vice President, Executive, 3010 North Loop West, P.O. Office Box 6217, Dallas, Texas 75221  
 Telephone: 214-751-1111  
 Alliquierque, New Mexico 87001  
 Form 10-K is available on request.  
 Annual shareholders meeting: November 7, 1980, 10 a.m. at the Company offices.

## Financial Highlights

<i>For the year ending June 30</i>	1980*	1979*	1978*	1977*	1976*
Gross income	\$32,561,623	\$39,497,054	\$34,444,496	\$21,160,930	\$16,177,561
Income before income taxes	7,102,353	6,028,842	5,666,986	2,290,719	1,675,673
Income taxes	2,300,000	1,700,000	1,750,000	800,000	698,431
Net income	4,802,353	4,328,842	3,916,986	1,490,719	977,242
Net income per common share	1.63	1.50	1.36	.52	.35
Dividends per share	.225	.10	—	—	—
Capital expenditures	8,891,581	497,462	9,208,138	1,439,857	3,267,402
Depreciation, depletion and amortization	1,376,732	4,706,887	5,064,812	1,261,947	1,225,504
<i>At year end</i>					
Working capital	12,145,098	13,485,606	4,865,063	4,572,787	4,285,595
Total assets	47,288,085	40,031,396	37,775,493	32,305,531	27,540,905
Long-term debt	996,283	1,817,876	3,472,740	2,548,936	2,878,462
Shareholders' equity	34,470,482	28,224,111	24,522,404	20,515,951	18,972,532
Book value per share	11.44	10.02	8.57	7.21	6.69
Number of employees	400	350	400	375	300

\*Restated to reflect 2 for 1 stock split declared February 1980

### Description of Company

Ranchers Exploration and Development Corporation is a diversified mining company whose shares are traded on the American Stock Exchange (Symbol RAN). The Company produces uranium, copper, and gold, and is developing a major silver property. The Company also receives substantial uranium royalties from properties mined by other companies. Headquarters of the Company are at 1776 Montano Road NW, Albuquerque, New Mexico; principal operations are located in New Mexico, Arizona, Utah, and Alaska.

The Company had 3,013,887 shares of common stock outstanding as of June 30, 1980. High and low prices of the stock by quarter during the last two fiscal years:

Quarter	1979		
	High	Low	
First	\$10.00	\$7.00	
Second	7.43	5.62	
Third	8.81	6.00	
Fourth	10.75	7.81	
Quarter	1980		
	First	\$11.06	\$ 7.38
	Second	14.50	7.63
	Third	29.50	14.38
	Fourth	23.25	15.00

Both years have been adjusted to reflect a 2 for 1 stock split effected in February 1980 in the form of a 100 percent stock dividend. Cash dividends were resumed in the third quarter of the 1979 fiscal year ending June 30, 1979, and in the 1980 fiscal year were paid at the rate of \$.05 (restated) per common share in the first two quarters and at the rate of \$.0625 per share in the second two. The Company expects to continue dividends at this level, reserving most of its earnings to finance the further growth of the Company.

Transfer Agent and Registrar: Republic National Bank of Dallas, Corporate Trust Department, Dallas, Texas 85221; Manufacturers Hanover Trust Company, Corporate Trust Department, 40 Wall Street, New York, New York 10015.

Additional information about the Company may be obtained from: Leland O. Erdahl, Senior Vice President, Finance, or Marvin K. Kaiser, Vice President and Treasurer; Phone: 505-344-3542. Address: Post Office Box 6217, Albuquerque, New Mexico 87197.

Form 10-K is available on request.

Annual shareholders meeting: November 7, 1980, 10 a.m., at the Company offices.

## President's Report

### Record Earnings Per Share; Precious Metals Activity Highlight 1980 Fiscal Year

Nineteen-eighty was a difficult year. Inflation increased and the recession began, helping to produce wide swings in metal prices which made the mining business unusually trying. However, the Company surmounted these difficulties in excellent shape, producing record earnings and proceeding apace with its new thrust into the mining of precious metals — an effort that will markedly change the complexion of the Company in the years just ahead.

#### Highlights

Highlights of the year:

Earnings totaled \$1.63 per share, compared to \$1.50 per share last year, an increase of about nine percent.

Dividends of \$.22½ per share were declared during the year, and a 2 for 1 stock split, in the form of a 100 percent stock dividend, was declared.

Uranium royalties more than doubled, and were a principal source of earnings.

Uranium production at the Johnny M Mine declined for the year, but began to improve in the fourth quarter as a new ore body came into full production.

Two million pounds of future uranium production from the Johnny M were sold to Taiwan Power Company at favorable prices.

Production of copper at the Bluebird Mine increased gradually during the year, exceeding 1979 output by about 23 percent.

Development of the Escalante Silver Mine began in the first quarter and remained on schedule throughout the year.

A new silver property, the Revenue-Virginus Mine located near Ouray, Colorado, was acquired and evaluation of workings and reserves was begun.

Operations at the Alaskan gold placers were expanded.

A strong exploration program was maintained, with the search for uranium continuing and a new gold and silver exploration program funded late in the year.

These achievements add up to a successful year, the only weakness being reduced production at the Johnny M and Bluebird Mines during much of the year. Both mines had operated below capacity in 1979, and 1980 was well advanced before they again started to perform at levels approaching optimum efficiency.

The difficulty at the Johnny M stemmed from delays in bringing one of the mine's principal ore deposits into full production. This finally occurred late in the year, and the mine is now operating at a satisfactory level. The lower production at the Bluebird can be traced back to 1977 when declining copper prices forced curtailment of mining operations. Mining was resumed in March 1979, but the effect of the curtailment continued to be felt until June of 1980 when production finally reached a satisfactory level.

Fortunately, these operational difficulties were offset by increased uranium royalties and by a substantial gain realized from hedging of future silver production. The royalties totaled \$3,577,682, while the pre-tax gain from the close-out of silver hedging positions amounted to \$3,565,373.

The Company's success in handling the wide fluctuations in metal prices was one of the highlights of 1980, a period of exceptionally volatile copper, uranium, gold, and silver prices. Management had felt for some time that uranium prices would soften and took steps early in the year to commit two million pounds of future production from the Johnny M at prices in excess of \$40 per pound of uranium oxide. The spot price for uranium subsequently declined to about \$32 per pound.

Silver prices rose from approximately \$10 per ounce to \$50 per ounce in the course of the year, and the Company entered the futures market to lock-in prices which would get its silver operations off to a sound start. This proved to be a successful strategy, with prices thereafter declining sharply, resulting in an unrealized gain of about \$6 million for the Company. More than half of this amount was subsequently realized and is being used in operation of the business, while the remainder has been carried forward into the current year.

Maxie L. Anderson



The Company sold its copper production during the year for an average of about \$.94 per pound. This was an improvement of about \$.15 per pound over the prior year, but less-than-optimal production prevented the Company from taking full advantage of this increase. Approximately 30 percent of the production in the new fiscal year has been committed at prices averaging nearly \$1 per pound.

Unquestionably the most important achievement of 1980 was the Company's progress in production of precious metals. Activities included expanded production from the Alaskan gold placers, development of the Escalante Mine, acquisition of the Revenue-Virginus Mine, and funding of a gold and silver exploration program which will provide about \$2 million for exploration in the next two years.

Management believes that inflation is not likely to abate appreciably in the foreseeable future, and as a result gold and silver prices will continue to rise. If this is the case, the Company's entry into the mining of precious metals will have been most timely. The Escalante, where milling of ore is scheduled to begin late in calendar year 1981 or early in 1982, should ultimately become the Company's largest operation, with annual silver production totaling about 1.5 million ounces. The Revenue-Virginus has the potential to become a substantial silver producer, and other prospects, both gold and silver, are being investigated under terms of the Company-managed exploration

fund. The Alaskan placer operation will remain small but, it appears, quite profitable once in full production. The upshot of all this activity is that precious metals should become, in the space of two to three years, the largest segment of the Company's business.

Despite the new emphasis on precious metals, the Company maintained an active uranium exploration program during the year, drilling some 464,000 feet in New Mexico, Utah, and Colorado. Reserves were added at the Johnny M and Hope mines and on Section 13 near the Johnny M where ore containing more than a million pounds of uranium has been delineated.

Management expects another good year in 1981. The Company is in strong financial condition (current assets-liabilities ratio of 4.37-1) and its copper and uranium operations are in their best order in several years. This should lead again to a year of satisfactory earnings and further progress on the precious metals projects that are expected to form a growing part of the Company's operations.

September 15, 1980

Maxie L. Anderson, President

# Management Discussion & Analysis

The Company had record earnings in 1980 despite a 17½ percent decline in gross income. This increase in earnings resulted from gains in three areas — uranium royalties, silver hedging, and interest income — which were not tied directly to gross income. Earnings as a percent of gross income were 15 percent — the highest in recent years; a year ago they were 11 percent.

Net income totaled \$4,802,353, an increase of about nine percent over the \$4,328,842 earned last year. Earnings per share were \$1.63 (\$.40, \$.31, \$.31 and \$.61 by quarters), compared to \$1.50 per share in 1979. Gross income was \$32,561,623, compared to \$39,497,054 a year ago; this decline resulted chiefly from termination of the Colorado uranium mill tailings leaching project, which had contributed revenues of \$12,491,067 in the prior year.

Income and earnings came from five major sources in 1980: uranium mining, copper mining, silver hedging activity, uranium royalties, and interest on investments.

## Uranium Mining

The Johnny M Mine produced 292,859 pounds of uranium oxide ( $U_3O_8$ ) in ore for the Company's account; 281,184 pounds were sold for \$8,793,297, or \$31.28 per pound. Pre-tax profit was \$779,972, or \$2.77 per pound. In 1979, the Mine produced 337,510 pounds of  $U_3O_8$  in ore for the Company's account, and 377,631 pounds were sold for \$12,231,167, or \$32.39 per pound. Pre-tax profit for the year was \$3,242,201, or \$8.59 per pound. The 13 percent decline in production — which greatly affected profits because of fixed costs at the mine — resulted from mining lower grade ore.

The Hope Mine, a small producer whose output is sold directly to United Nuclear in the form of ore, operated profitably during the year. The Company's share of production (the mine is 50 percent owned by Chaco Energy) totaled 17,916 tons of ore with an average grade of .13 percent  $U_3O_8$ . This ore was sold for \$1,255,958, or \$28.69 per pound. The production represented a decrease of 43 percent from the 31,580 tons of ore produced in 1979. That ore had a grade of .16 percent  $U_3O_8$  and was sold for \$2,838,912, or \$28.27 per pound. Profit was nearly \$9 per pound in 1980, compared to a profit of about \$12 per pound in 1979.

## Copper Mining

The Company's copper mines operated at about a breakeven level for the year as a result of low copper production and higher operating costs. The Bluebird Mine, where production increased by 23 percent, had sales of \$11,809,766, compared to \$8,178,117 a year ago; pre-tax profits were, however, only \$7,588; a year

ago they were \$184,088. The Big Mike Mine, now closed, had sales of \$214,846 from inventory, and pre-tax profits of \$119,377. Sales in 1979 were \$959,074, producing a pre-tax profit of \$239,149. The Old Reliable Mine produced 1,850,557 pounds of copper of which 461,651 pounds were sold for \$378,452, resulting in a loss of \$20,208.

## Hedging/Royalties

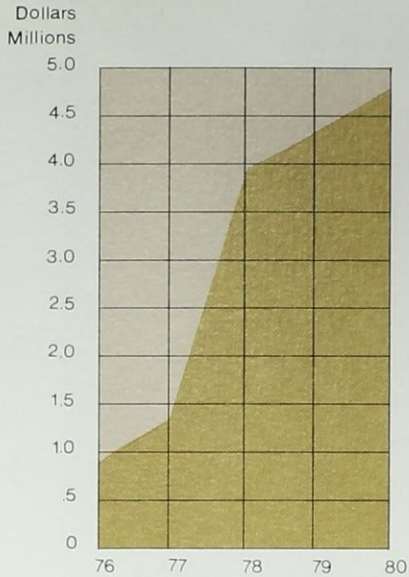
The pre-tax gain from silver hedging amounted to \$3,565,373 for the year, and an unrealized gain of about \$2.5 million was carried forward into the next fiscal year. There were no silver hedging transactions in 1979. Royalties from uranium properties totaled \$3,577,682 for the year, including a one-time settlement of litigation with United Nuclear which amounted to about \$1.35 million. For the year, royalties were up 110 percent over the \$1,704,088 received in 1979. Interest on investments — primarily short-term certificates of deposit and bank commercial paper — totaled \$1,544,770, compared to \$657,925 in 1979. Miscellaneous income, mostly from gains on sales of stock and other assets, was \$622,904, compared to \$141,459 last year. The Company also received \$106,285 from Ran-Con, a mine contracting subsidiary, a decrease from the \$189,315 received in the prior year.

## Other Transactions

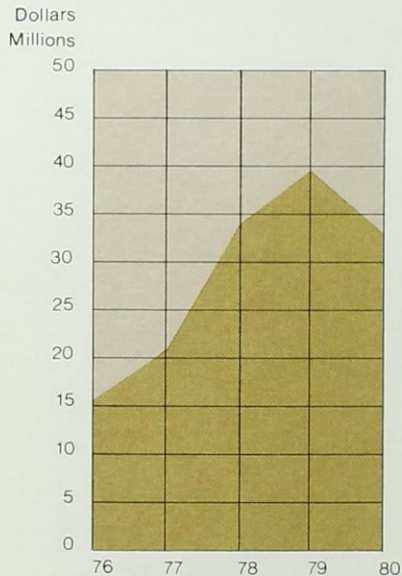
Exploration and property maintenance expenses decreased by 26 percent for the year, totaling \$1,102,086, compared to \$1,479,221 in 1979. Capital expenditures for the Company's silver and gold operations during the year included \$5,023,000 at the Escalante Mine and \$2,087,000 at the Alaskan placer properties.

Dividends totaling \$659,406 were declared during the year, compared to \$283,681 a year ago. A 2 for 1 stock split in the form of a 100% stock dividend was also declared, and the Company's 5-3/4% convertible debentures (principal amount \$1,639,000) were exchanged for common stock at the rate of \$12.35 per share (post-split). This action reduced long-term debt to \$1,342,000, all for contracts to purchase land. Current portion of this debt is \$346,000. Long-term debt at the end of the prior year was \$1,877,269 of which \$59,393 was current. The Company maintained its strong financial condition during the year, ending the year with cash and equivalents of \$11,746,000, compared to \$12,573,000 at the end of 1979. The ratio of current assets to current liabilities was 4.37-1 at the end of the year vs. 4.8-1 at the end of 1979. Cash flow from operations for the year: \$7,956,000; 1979: \$9,848,000. Return on total stockholders' equity: 17 percent; 1979: 18 percent.

## SUMMARY OF OPERATIONS



**Net Income  
1976/1980**

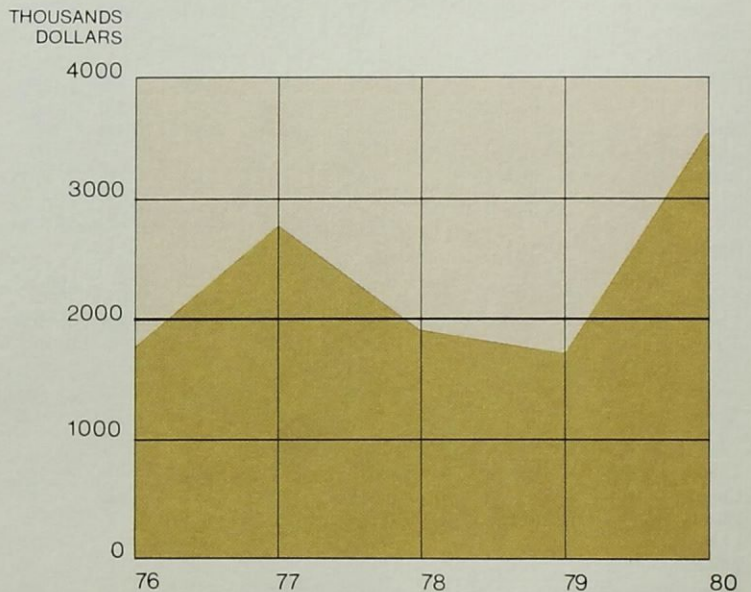


**Revenues  
1976/1980**

(000 omitted except for per share amounts)

Year ended June 30	1980	1979*	1978*	1977*	1976*
<b>Income:</b>					
Net Sales	\$23,251	\$36,994	\$32,508	\$18,284	\$14,224
Uranium Royalties	3,578	1,704	1,829	2,744	1,797
Gain on Metal Futures Contracts	3,565	—	—	—	—
Interest and Other	2,167	799	107	133	157
	<u>32,561</u>	<u>39,497</u>	<u>34,444</u>	<u>21,161</u>	<u>16,178</u>
<b>Deductions from Income:</b>					
Cost of Products Sold	22,346	30,232	25,490	16,740	12,313
Exploration, Conservation and Maintenance of Mining Properties	1,102	1,479	1,160	847	813
Administrative and General Expenses	1,919	1,464	1,362	851	969
Interest Expense	92	293	765	432	407
	<u>25,459</u>	<u>33,468</u>	<u>28,777</u>	<u>18,870</u>	<u>14,502</u>
<b>Income from Operations before Applicable Income Taxes</b>					
	7,102	6,029	5,667	2,291	1,676
<b>Income Taxes</b>	<u>2,300</u>	<u>1,700</u>	<u>1,750</u>	<u>800</u>	<u>699</u>
<b>NET INCOME</b>	<u>\$ 4,802</u>	<u>\$ 4,329</u>	<u>\$ 3,917</u>	<u>\$ 1,491</u>	<u>\$ 977</u>
<b>Net Income per Common Share</b>	<u>\$1.63</u>	<u>\$1.50</u>	<u>\$1.36</u>	<u>\$ .52</u>	<u>\$ .35</u>
<b>Average Shares Outstanding</b>	2,946	2,879	2,880	2,894	2,834

\*Restated to reflect the 2-for-1 stock split, effected in the form of a stock dividend, paid on March 14, 1980 to stockholders of record on February 22, 1980.



**Uranium Royalties  
1976/1980**



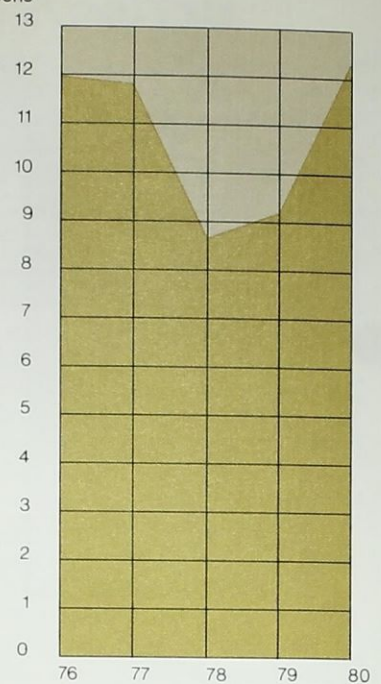
## PRODUCT SUMMARY

For year ended June 30, 1980-1976\*

	1980	1979	1978	1977	1976
<b>NET SALES TO UNAFFILIATED CUSTOMERS</b>					
Uranium	\$10,436	\$24,789	\$21,464	\$ 4,562	\$ 279
Copper	12,403	9,125	8,655	11,939	11,985
Gold	306	—	—	—	—
Other	106	3,079	2,390	1,784	1,960
<b>TOTAL SALES</b>	<b>23,251</b>	<b>36,993</b>	<b>32,509</b>	<b>18,285</b>	<b>14,224</b>
<b>OPERATING PROFIT (LOSS)</b>					
Uranium	944	5,817	7,026	477	—
Copper	107	168	(399)	861	1,743
Gold	77	—	—	—	—
Other	(223)	776	390	207	167
<b>TOTAL OPERATING PROFIT</b>	<b>905</b>	<b>6,761</b>	<b>7,017</b>	<b>1,545</b>	<b>1,910</b>
<b>OTHER INCOME</b>					
Uranium royalties	3,578	1,704	1,829	2,744	1,797
Gain on metal futures contracts	3,565	—	—	—	—
Interest and other	2,167	799	107	132	157
<b>TOTAL OTHER INCOME</b>	<b>9,310</b>	<b>2,503</b>	<b>1,936</b>	<b>2,876</b>	<b>1,954</b>
<b>OTHER DEDUCTIONS</b>					
Exploration, conservation and maintenance of mining properties	1,102	1,479	1,160	847	813
Administrative and general expense	1,919	1,463	1,362	851	968
Interest expense	92	293	764	432	407
<b>TOTAL OTHER DEDUCTIONS</b>	<b>3,113</b>	<b>3,235</b>	<b>3,286</b>	<b>2,130</b>	<b>2,188</b>
<b>INCOME BEFORE TAXES</b>	<b>7,102</b>	<b>6,029</b>	<b>5,667</b>	<b>2,291</b>	<b>1,676</b>
<b>IDENTIFIABLE ASSETS</b>					
Uranium	9,418	10,126	17,230	9,840	5,048
Copper	4,969	5,100	5,513	6,814	7,624
Silver	5,432	—	—	—	—
Gold	2,183	—	—	—	—
Other	467	623	280	498	946
	22,469	15,849	23,023	17,152	13,618
General corporate assets	17,137	16,500	7,067	7,467	6,219
Assets of Tungsten Queen Mine held for disposition (see Note C)	7,682	7,682	7,683	7,685	7,702
<b>TOTAL ASSETS</b>	<b>47,288</b>	<b>40,031</b>	<b>37,773</b>	<b>32,304</b>	<b>27,539</b>
<b>DEPRECIATION, DEPLETION &amp; AMORTIZATION</b>					
Uranium	132	3,586	3,097	—	—
Copper	1,030	970	1,166	1,007	924
Silver	71	—	—	—	—
Gold	5	—	—	—	—
Other	23	31	642	109	165
General corporate assets	116	120	157	144	136
<b>CAPITAL EXPENDITURES</b>					
Uranium	119	149	8,058	984	384
Copper	944	258	692	370	1,993
Silver	5,204	—	—	—	—
Gold	2,087	—	—	—	—
Other	11	15	48	19	52
General corporate assets	526	74	409	65	836

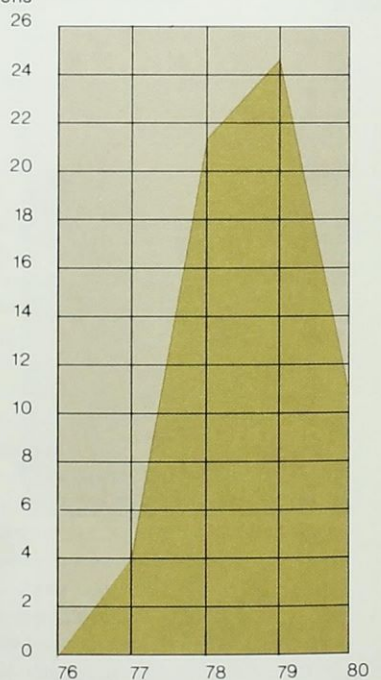
\*000 omitted

Dollars  
Millions



**Copper Sales  
1976/1980**

Dollars  
Millions



**Uranium Sales  
1976/1980**

## Copper Tough Year for Operations Despite Rise in Production

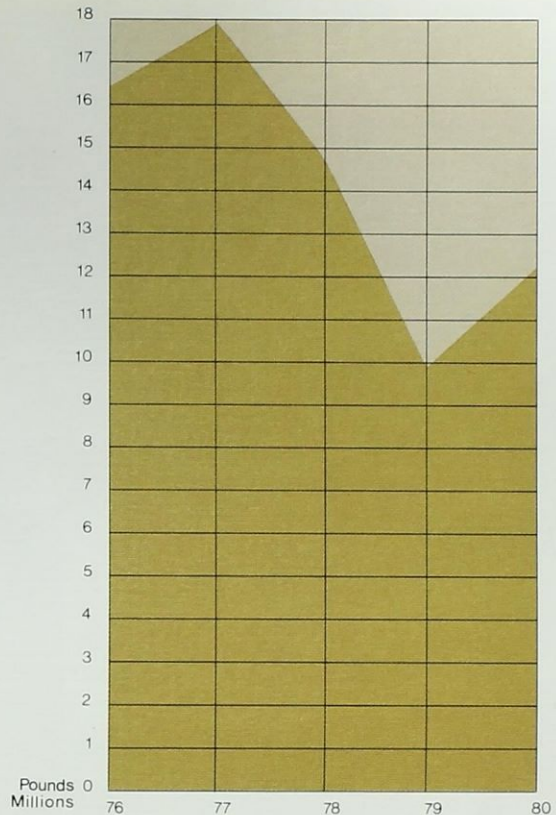
Copper production increased in 1980, but the Company's mines still operated at about a breakeven level during the year. Production at the Bluebird Mine, the Company's largest producer, continued to show the effects of curtailment of mining in 1977-78, although output did improve substantially in the last month of the fiscal year, indicating that the mine has finally returned to a normal level of operation. Production in 1981 should reach about 14.5 million pounds. Production from all properties in 1980 was 14,039,806 pounds, including 12,189,249 pounds at the Bluebird and 1,850,557 pounds at the Old Reliable Mine. This was an increase of about 34 percent over the 10,481,056 pounds produced in 1979, of which 9,949,624 pounds came from the Bluebird.

The Bluebird is a leaching operation where low grade oxide copper ore is mined from an open pit and transported to heaps where sulfuric acid is applied to dissolve the copper, producing a copper-bearing solution which is treated by solvent extraction-electrowinning (see next page). New ore was not placed in the heaps when low prices forced curtailment of mining in October 1977, although leaching continued. The heaps thus gradually became depleted, affecting production long after mining resumed in February 1979. Only 2,500,000 tons of ore were placed in heaps in the 1979 fiscal year, compared to 4,111,984 tons in the year just completed.

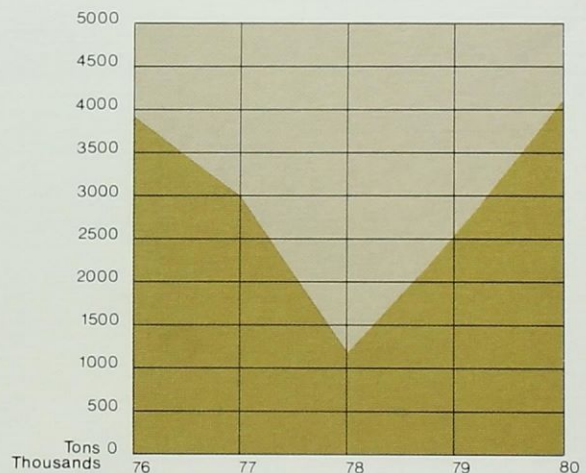
Production rose slowly in 1980, totaling 2,601,508 pounds in the first quarter, 3,264,963 pounds in the second, 2,936,321 in the third, and 3,386,457 pounds in the fourth. The third quarter dip was traceable chiefly to heavy rains, which diluted solutions coming from the heaps. To operate profitably at current prices of about \$.90 per pound, the Bluebird must produce approximately 1.2 million pounds of copper per month — about the amount produced in June.

The only other property operated during the fiscal year was the Old Reliable Mine, another copper leaching operation near Mammoth, Arizona, where production of cement copper resumed in September 1979 for the first time since 1975. Production will end, and the mine — the first copper deposit to be blasted and leached entirely in place — will be closed by the end of the current calendar year.

*Continued on next page*



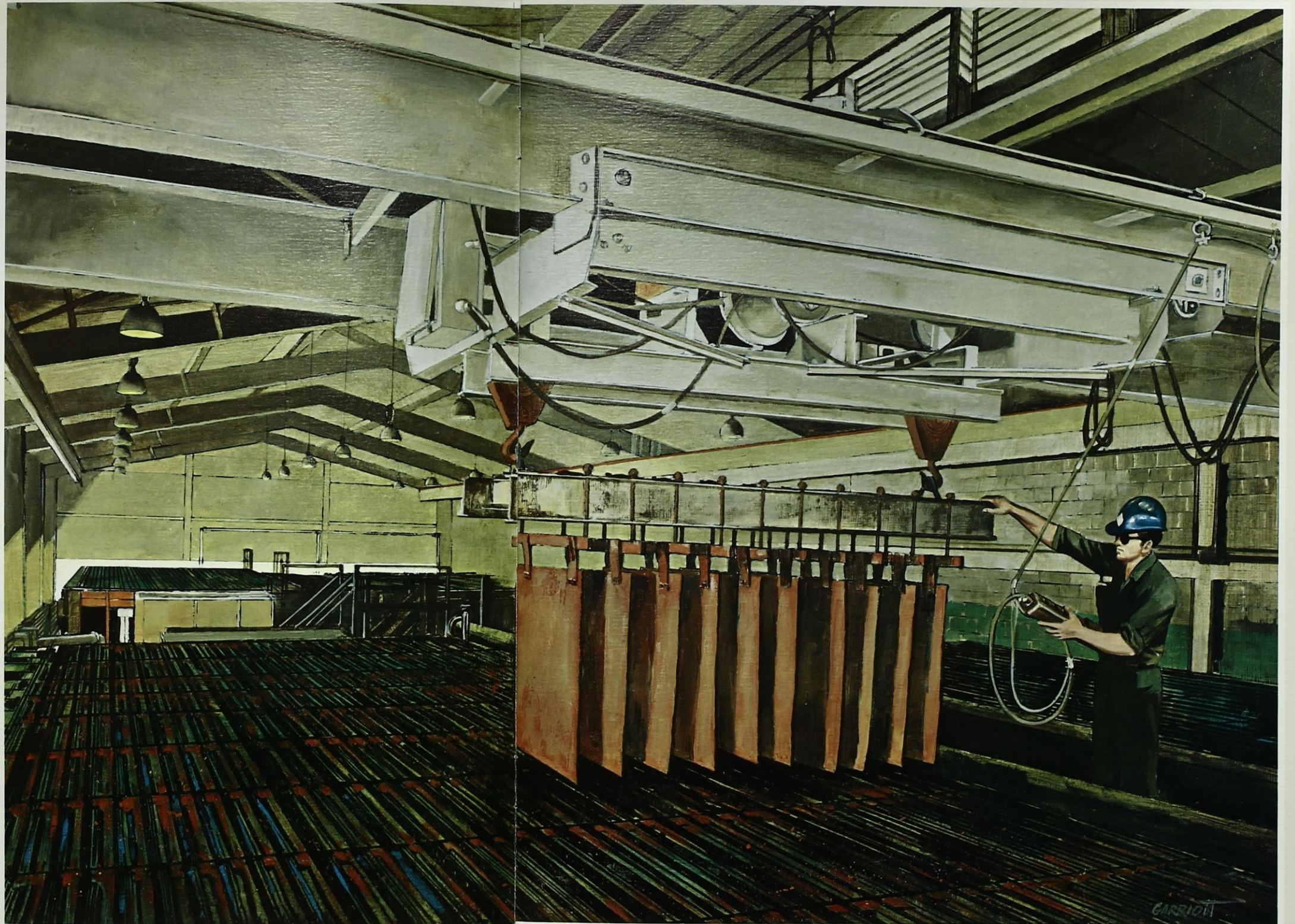
**Bluebird  
Copper Production  
1976/1980**



**Bluebird  
Ore Production  
1976/1980**

### Copper Cathodes

Most of the Company's copper production in 1980 came from the Bluebird Mine, near Miami, Arizona, where copper cathodes (right) have been produced since 1968 by a process known as solvent extraction-electrowinning. This process, first tried on a commercial basis at the Bluebird, was made possible by a novel acid-concentrating solvent developed by General Mills; the solvent has the unique ability to attract copper in a weak acid solution and to be stripped from the concentrated copper in a strong acid solution. This works ideally at the Bluebird, where sulfuric acid is trickled onto large heaps of ore, leaching out the copper to form a solution of copper sulfate containing two grams of copper per liter — about 16 pounds of copper per thousand gallons of solution. This weak acid-copper solution is then mixed with the solvent, which upgrades and purifies the solution so that it contains about 45 grams of copper per liter of solution. The copper is then stripped from the solvent with a strong acid and this copper-acid mixture is then pumped to the tankhouse (right) containing 45 cathode production cells. In each of these cells, suspended in the circulating copper-acid solution, are 40 lead sheets and 40 copper starter sheets, each about three feet square and connected in an electrical circuit so that the current will flow from the lead anodes through the solution to the thin copper starter sheets; this attracts copper ions to the sheets in a typical electrowinning process. The sheets, only 1/32 of an inch thick at first, are plated with the copper until they are about half an inch thick and weigh approximately 120 pounds. At the end of five days, they are pulled from the cell (nine cells are pulled each day) and shipped to brass mills and other consumers requiring copper with a purity of at least .999 percent.



Pulling Copper Cathodes at the Bluebird Mine

## Uranium Production Declines At Hope & Johnny M

The Company produced 339,628 pounds of uranium oxide ( $U_3O_8$ ) in 1980 for its account, with all production coming from the Hope and Johnny M mines in northwest New Mexico. This was a decrease in output from the two mines of 22 percent from the prior year. There was no production from the Colorado uranium mill tailings project, where 182,751 pounds of  $U_3O_8$  were produced in 1979. The Company continues to own 1.46 million tons of tailings at Durango, Colorado, but took no steps to move or process the uranium-bearing material in 1980 pending action by governmental agencies to dispose of tailings in several western states under terms of recently-enacted federal legislation.

The Hope Mine, a small producer jointly-owned with Chaco Energy, produced 17,916 tons of ore and 46,769 pounds of  $U_3O_8$  for the Company's account during the year. It was thought that the property might be mined out during the year, but sufficient new ore was discovered to sustain the operation throughout the year and into 1981. The Johnny M Mine, owned with HNG Oil Company, produced 292,859 pounds of  $U_3O_8$  for the Company's account, a decline of about 13 percent from last year. Ore production increased for the year, the Company's share rising to 80,443 tons from 70,859 tons a year ago, but a reduction in grade — .18 percent vs. .24 percent a year ago — reduced the number of pounds produced. A satisfactory rate of production was not achieved until late in the year when the mine's northwest ore body was brought into full production; output is averaging about 600 tons of ore per day, a level which appears sustainable in the new year.

Uranium royalties from properties in northwest New Mexico mined by Kerr McGee and United Nuclear were a major source of income for the Company in 1980. A one-time settlement of litigation with United Nuclear helped raise royalties to a record level. In June 1980, the Company filed a suit in U.S. District Court requesting interpretation of royalty provisions applicable to Kerr McGee's operations. Kerr McGee had previously sold its production at relatively low prices, a factor which has resulted in less than satisfactory royalties under Kerr McGee's interpretation of the agreements.



Dumping Uranium Ore at the Johnny M Mine.

## Silver

### Escalante Development Begins; Second Silver Mine Acquired

Development of the Escalante Mine in southwest Utah began in September 1979 and proceeded smoothly throughout the year. Some 3,000 feet of drift and decline had been completed as of September 1980, and the vertical crater retreat mining method had been successfully tested. Some 20,000 tons of ore had been stockpiled on the surface, and an additional 7,500 tons had been broken, but not yet brought to the surface. A total of 100,000 tons, averaging about seven ounces of silver per ton, is expected to be in stockpile by November 1981 when the new mill should be ready to accept initial feed. A mine dewatering test was also conducted during the year with satisfactory results. Initial production is coming from stoping areas above the water table, but will be followed, within a year, by mining below the water table. When in full production, the mine will be one of the largest primary silver producers in the country, producing about 1.5 million ounces of silver annually. Based on the present mine plan, recoverable reserves are estimated to be 1.64 million tons of ore containing in excess of 10 ounces of silver per ton. The mine contains additional geologic reserves and the chance for further silver recovery is believed to be excellent.

Construction of a 500 ton per day mill began in September and should be completed in about 13 months. The facility will consist basically of crushing and grinding equipment and leaching tanks for treating the ground ore with sodium cyanide to produce either silver bullion or silver precipitate. Total cost of bringing the property into production will be about \$25 million, including \$13 million for the mill and ancillary facilities. A portion of the financing is expected to come from a private placement of about \$18 million in long term debt.

A second silver property, the Revenue-Virginus Mine in southwest Colorado was acquired in December 1979, and rehabilitation of the 7,600-foot tunnel leading to the workings was begun in June. This effort should be largely completed by the end of the calendar year, permitting evaluation of reserves. The mine, operated near the turn of the century and again in the mid-1960s, is believed to contain at least one million tons of ore with a silver content of some 10 ounces per ton. Milling facilities are present in the area — near Ouray, Colorado — and might be available to process mine production should commercial operations begin.

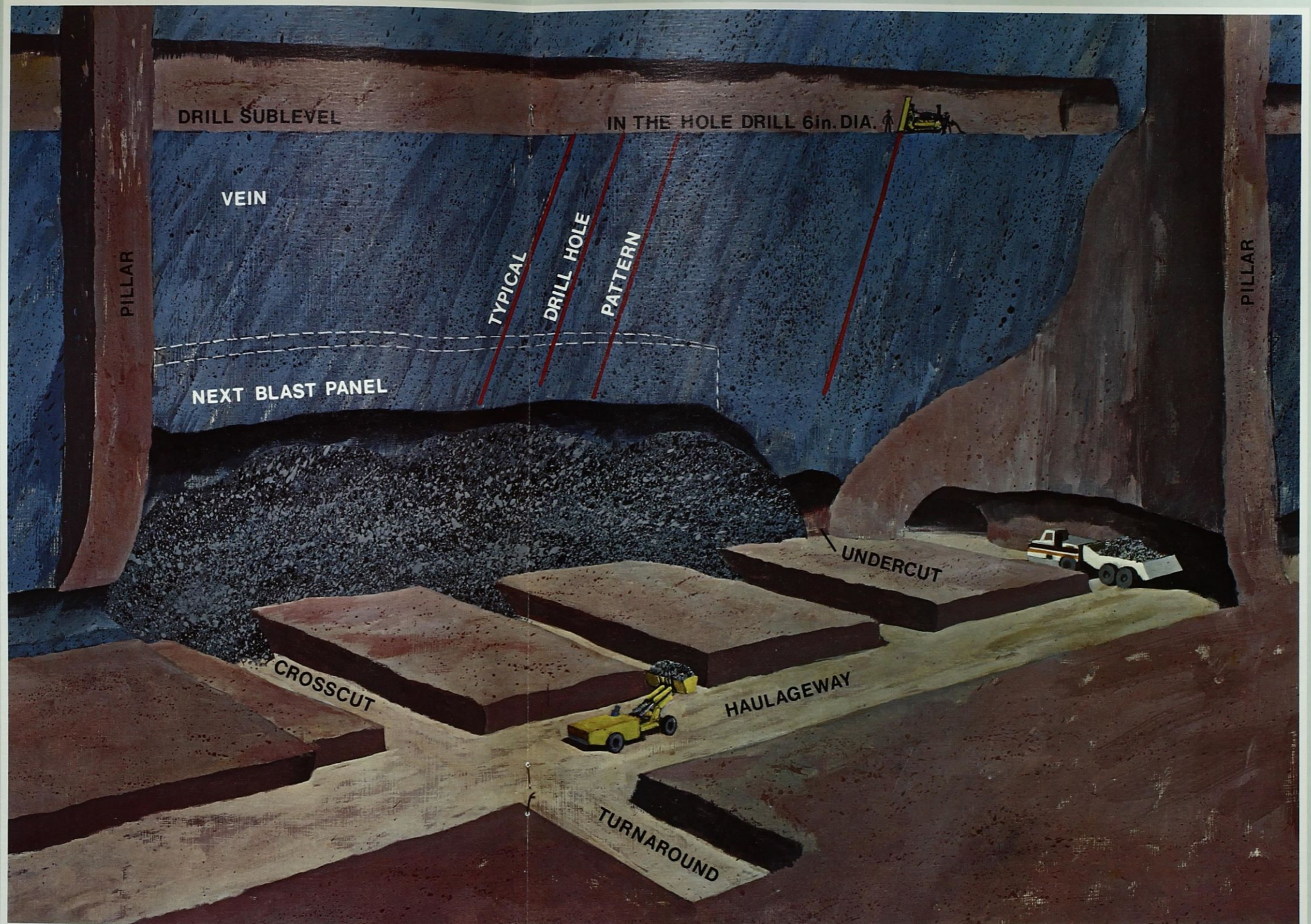
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*Loading Ore Truck Underground at the Escalante Mine*

### A New Mining Method

A new bulk mining method known as vertical crater retreat has been tested at the Escalante Mine and appears to be a safe, economical way of mining the ore. The technique consists basically of mining a section of ore between two drifts (tunnels) driven, one above the other, into the vein. These drifts are about 100 feet apart vertically and 12 to 25 feet wide, depending on the width of the vein. A drill is moved onto the floor of the top drift and bores 6½-inch-diameter holes through the section of ore between the drifts. Sixty to seventy pounds of powder in slurry form are poured into each hole, filling about three feet near the bottom. The powder is detonated, cratering the bottom seven to eight feet of the ore section. The loading-shooting sequence is repeated about every 1½ days, with the mining gradually retreating upward until the entire section has been mined. The broken ore (some 800 tons when a 60x20x8-foot section is blasted loose) accumulates on the floor of the lower drift where it is removed through cross-cuts by low-profile front-end loaders which dump it into large trucks for transport to the surface. The drill-blast-muck sequence then begins on the next section, with mining proceeding downward, section by section, until the bottom of the vein is reached. It appears that 20 to 30 tons of ore can be mined per man per shift, several times the amount which would be mined with conventional jackleg drilling.



Cutaway Drawing of Vertical Crater Retreat Mining

## Gold Placer Operation Expanded As Result of Trial Mining

The Company began recovering a limited amount of gold in a test mining program at its placers in eastern Alaska in June 1979. Success of this operation, in which approximately 600 ounces of gold were recovered from 47,000 cubic yards of gravel, led to expansion of mining this past summer. During a four-month season which ended in September, some 2,000 ounces

of gold were expected to be recovered from about 180,000 cubic yards of gravel. The Company had hoped to recover nearly double this amount, but startup delays and a shortage of water hampered the operation. However, 5,000 ounces per season appears to be a reasonable production goal for the operation, and the mining plan is being strengthened with additional equipment to achieve that objective in 1981.

The properties are located about 150 miles south-east of Fairbanks in a remote area which is not accessible until late spring and where snow and freezing temperatures force operations to end early in the fall.



Gold Sluicing Operation in Alaska

In the season just ended, supplies and equipment were freighted to the site in March, the first crew arrived in mid-May and mining began in late June. The placers, first discovered in 1900 and worked periodically since then, were drilled extensively by the Company in 1974 and 1975, and several million cubic yards of reserves were delineated. Operations to date have been confined to an area of about 1.3 million cubic yards containing gold values averaging about \$11.50 per yard at current gold prices. Other reserves, containing less gold, are present in the vicinity. The gold is recovered by feeding the gravel

into sluice boxes, where it is washed and the gold separated by gravity (see back cover).

The Company is working to expand its gold operations in the continental United States, and began evaluating several gold properties in 1980 under terms of a gold and silver exploration fund completed during the year. Properties under active investigation include gold prospects in Nevada and Arizona, a gold-copper prospect in Montana, and a silver prospect in Colorado. The Company is general partner and manager of the exploration program.



## Management

### Officers

Maxie L. Anderson, President, became manager of the Company in 1962 and president in 1963; BS degree in industrial engineering, University of North Dakota, 1956.

Herbert M. Campbell II, Vice President and Secretary, joined Company in 1967, became Secretary in 1968 and assumed present position in 1974; degree in law from University of New Mexico, 1967.

Leland O. Erdahl, Senior Vice President, Finance, joined Company in 1970 as vice president, promoted to present

position in 1979; BS degree in business, College of Santa Fe, 1970.

David K. Hogan, Vice President, Engineering, joined Company in 1968, assumed present position in 1974; BS degree in mining engineering, University of Arizona, 1962.

Marvin K. Kaiser, Vice President and Treasurer, joined Company in 1969, became Treasurer in 1974 and Vice President in 1979; BS degree in accounting, Southern Illinois University, 1963.

Paul A. Matthews, Vice President, Operations, joined Company in 1974; BS degree in mining engineering, Missouri School of Mines, 1950.

John E. Motica, Senior Vice President, Geology, joined

Company in 1967; Engineer of Mines degree, Colorado School of Mines, 1948.

James M. Rosel, Assistant Vice President and Assistant Secretary, joined Company in 1978 and assumed present position in 1979; degrees in law from University of Cincinnati and University of Florida, 1974-75.

### Directors

Mr. Anderson and Mr. Motica are also members of the Company's Board of Directors, having served in that capacity since 1957 and 1975, respectively. Other members and the year they joined the Board:

Frank Coolbaugh (1968), President, Peabody Holding Company and Chairman of Peabody Coal Company

Phil S. Cross (1976), Vice President, Kerr Addison Mines Limited

Robert M. Haldeman (1977), Executive Director, Minerec Corporation and General Manager, Sociedad Minera Pudahuel Limitada

Edward E. Monteith (1962), Managing Partner, Thomson-Monteith

Edward McL. Tittmann (1971), Mining Consultant and former Chairman of the Board and Chief Executive Officer, American Smelting and Refining Company



## Assets

### Ranchers Exploration and Development Corporation and Subsidiaries

CONSOLIDATED BALANCE SHEETS / JUNE 30, 1980 AND JUNE 30, 1979

	1980	1979
ASSETS		
CURRENT ASSETS		
Cash	\$ 1,027,767	\$ 326,900
Certificates of deposit and short-term investments, at cost which approximates market	<u>10,718,682</u>	<u>12,246,013</u>
	11,746,449	12,572,913
Trade accounts receivable	1,180,159	3,045,336
Inventories—Note B	1,375,617	476,638
Deposits with brokers for metal futures contracts	320,352	—
Prepaid expenses and other current assets	<u>1,123,841</u>	<u>930,128</u>
TOTAL CURRENT ASSETS	15,746,418	17,025,015
PROPERTY, PLANT AND EQUIPMENT— at cost		
Land—Note F	1,734,627	477,988
Buildings and equipment	15,534,928	12,013,242
Mineral interests, mining claims, leases and permits—Note D	866,117	866,117
Deferred intangible mining and development costs	<u>5,640,973</u>	<u>1,607,958</u>
	23,776,645	14,965,305
Allowances for depreciation, depletion and amortization	<u>10,586,336</u>	<u>9,404,055</u>
	13,190,309	5,561,250
IDLE FACILITIES—Note C		
Tungsten Queen Mine	7,682,436	7,682,436
Other	<u>1,720,511</u>	<u>2,123,342</u>
	9,402,947	9,805,778
OTHER ASSETS		
Investment in joint ventures and limited partnership—Note D	4,970,018	3,360,550
Claim for refund of federal income taxes—Note E	1,068,190	1,068,190
Other assets—Note B	<u>2,910,203</u>	<u>3,210,613</u>
	<u>8,948,411</u>	<u>7,639,353</u>
	<u>\$47,288,085</u>	<u>\$40,031,396</u>

See notes to consolidated financial statements

## Liabilities and Stockholders' Equity

Ranchers Exploration and Development Corporation and Subsidiaries

CONSOLIDATED BALANCE SHEETS / JUNE 30, 1980 AND JUNE 30, 1979

	1980	1979
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Trade accounts payable	\$ 2,184,551	\$ 1,072,696
Federal and state income taxes	—	838,212
Dividends payable	188,369	140,725
Other liabilities	882,152	1,428,383
Current portion of long-term debt	<u>346,248</u>	<u>59,393</u>
TOTAL CURRENT LIABILITIES	3,601,320	3,539,409
LONG-TERM DEBT—Note F		
5¾% convertible subordinated debentures due January 15, 1989	—	1,639,000
Contracts payable for purchase of land carried at \$1,614,582	<u>1,342,531</u>	<u>238,269</u>
	1,342,531	1,877,269
Less portion classified as current liability	<u>346,248</u>	<u>59,393</u>
	996,283	1,817,876
DEFERRED FEDERAL INCOME TAXES—Note E	8,220,000	6,450,000
STOCKHOLDERS' EQUITY—Notes F, G, AND I		
Common Stock—par value \$.50 a share, authorized 4,000,000 shares, issued (1980—3,206,267; 1979—1,542,228) including shares in treasury	1,603,134	771,114
Capital in excess of par value	6,393,599	5,530,899
Retained earnings	<u>27,514,690</u>	<u>23,371,743</u>
	35,511,423	29,673,756
Less cost of Common Stock in treasury (1980—192,380 shares; 1979—133,724 shares)	1,040,941	1,449,645
	<u>34,470,482</u>	<u>28,224,111</u>
	<u>\$47,288,085</u>	<u>\$40,031,396</u>

See notes to consolidated financial statements

## Statements of Consolidated Income

Ranchers Exploration and Development Corporation and Subsidiaries

YEAR ENDED JUNE 30, 1980 AND JUNE 30, 1979

	1980	1979
Income:		
Net sales	\$23,250,894	\$36,993,582
Uranium royalties	3,577,682	1,704,088
Gain on metal futures contracts—Note K	3,565,373	—
Interest and other	2,167,674	799,384
	<u>32,561,623</u>	<u>39,497,054</u>
Deductions from income:		
Cost of products sold	22,346,065	30,232,338
Exploration, conservation and maintenance of mining properties	1,102,086	1,479,221
Administrative and general expenses	1,919,156	1,463,930
Interest expense	91,963	292,723
	<u>25,459,270</u>	<u>33,468,212</u>
INCOME BEFORE INCOME TAXES	7,102,353	6,028,842
Income taxes—Note E:		
Current	530,000	900,000
Deferred	1,770,000	800,000
	<u>2,300,000</u>	<u>1,700,000</u>
NET INCOME	<u>\$ 4,802,353</u>	<u>\$ 4,328,842</u>
Net income per common share—Note G	<u>\$1.63</u>	<u>\$1.50</u>
Weighted average number of common shares outstanding	2,945,828	2,878,502
<i>See notes to consolidated financial statements</i>		

# Statements of Consolidated Stockholders' Equity

Ranchers Exploration and Development Corporation and Subsidiaries

YEAR ENDED JUNE 30, 1980 AND JUNE 30, 1979

	1980	1979
COMMON STOCK		
Balance at beginning of year	\$ 771,114	\$ 771,114
Conversion of 5¾% debentures—81,079 shares—Note F	40,540	—
Stock split—1,582,960 shares—Note G	791,480	—
BALANCE AT END OF YEAR	<u>\$ 1,603,134</u>	<u>\$ 771,114</u>
CAPITAL IN EXCESS OF PAR VALUE		
Balance at beginning of year	\$ 5,530,899	\$ 5,530,053
Excess of conversion price over par value on shares issued on conversion of debentures—Note F	1,424,419	—
Excess of market value over cost of treasury shares issued for amendment to a royalty agreement and services rendered	224,123	—
Transferred to capital stock for par value of shares issued for stock split—Note G	(791,480)	—
Proceeds in excess of cost of treasury shares sold under stock option plan	5,638	846
BALANCE AT END OF YEAR	<u>\$ 6,393,599</u>	<u>\$ 5,530,899</u>
RETAINED EARNINGS		
Balance at beginning of year	\$23,371,743	\$19,326,582
Net income for the year	4,802,353	4,328,842
Cash dividends declared—1980 \$.225 per share; 1979 \$.10 per share	(659,406)	(283,681)
BALANCE AT END OF YEAR	<u>\$27,514,690</u>	<u>\$23,371,743</u>
TREASURY STOCK		
Balance at beginning of year	\$ 1,449,645	\$ 1,105,345
Shares purchased for treasury—(1980—400 shares; 1979—24,700 shares)	6,087	357,642
Shares issued for amendment to a royalty agreement and services rendered—20,400 shares	(117,577)	—
Stock split—106,907 shares	—	—
Shares sold under option plan—(1980—28,251 shares; 1979—1,250 shares)	(297,214)	(13,342)
BALANCE AT END OF YEAR	<u>\$ 1,040,941</u>	<u>\$ 1,449,645</u>

See notes to consolidated financial statements

# Statements of Changes in Consolidated Financial Position

## Ranchers Exploration and Development Corporation and Subsidiaries

YEAR ENDED JUNE 30, 1980 AND JUNE 30, 1979

	1980	1979
SOURCE OF FUNDS		
Net income	\$ 4,802,353	\$ 4,328,842
Add charges to income not requiring working capital:		
Provision for depreciation, depletion and amortization	1,376,732	4,706,887
Amortization of debt expense	7,858	12,364
Provision for deferred income taxes	<u>1,770,000</u>	<u>800,000</u>
TOTAL FROM OPERATIONS	7,956,943	9,848,093
Capital stock issued on conversion of debentures	1,503,832	—
Issue of treasury stock for amendment to a royalty agreement and services rendered	341,700	—
Decrease in other assets	253,680	—
Proceeds from sale of treasury stock	302,852	14,188
Carrying amount of property, plant and equipment disposals	288,620	181,818
Decrease in investment in joint ventures	<u>—</u>	<u>1,498,693</u>
TOTAL	10,647,627	11,542,792
APPLICATION OF FUNDS		
Decrease in long-term debt	821,593	1,654,864
Increase in investment in joint ventures and limited partnership	1,609,468	—
Additions to land	1,256,639	—
Additions to buildings and equipment	3,601,927	497,462
Additions to mineral interests, mining claims, leases and permits	4,033,015	—
Increase in other assets	—	128,600
Purchase of common stock for treasury	6,087	357,642
Cash dividends declared	<u>659,406</u>	<u>283,681</u>
TOTAL	<u>11,988,135</u>	<u>2,922,249</u>
INCREASE (DECREASE) IN WORKING CAPITAL	<u>\$ (1,340,508)</u>	<u>\$ 8,620,543</u>
CHANGE IN COMPONENTS OF WORKING CAPITAL		
Increase (decrease) in current assets:		
Cash, certificates of deposit and short-term investments	\$ (826,464)	\$ 9,309,035
Trade accounts receivable	(1,865,177)	149,146
Inventories	898,979	(1,709,277)
Deposits with brokers for metal futures contracts	320,352	—
Prepaid expenses and other current assets	<u>193,713</u>	<u>280,699</u>
	(1,278,597)	8,029,603
Increase (decrease) in current liabilities:		
Trade accounts payable	1,111,855	(168,556)
Federal and state income taxes	(838,212)	35,900
Other liabilities	(498,587)	477,716
Current portion of long-term debt	<u>286,855</u>	<u>(936,000)</u>
	61,911	(590,940)
INCREASE (DECREASE) IN WORKING CAPITAL	<u>\$ (1,340,508)</u>	<u>\$ 8,620,543</u>

See notes to consolidated financial statements

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### NOTE A—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Ranchers Exploration and Development Corporation is engaged primarily in mining and mineral processing. The accounting principles which materially affect the determination of consolidated financial position, changes in financial position, or results of operations are summarized below.

*Principles of Consolidation:* The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. Upon consolidation, intercompany accounts and transactions have been eliminated. The Company's portion of sales and operating expenses arising from joint ventures are included in income and deductions from income of the Company.

*Inventories:* Inventories are stated at the lower of cost (principally average cost) or market.

The Company may hedge a portion of its production of metals through the sale of futures contracts. When these contracts are repurchased and replaced with physical sales contracts covering metal to be produced by the Company the resulting profit (or loss) is included in inventory. These amounts are then credited (or charged) to income when delivery is made under the contracts.

*Metal Futures Contracts:* The Company also enters into hedging transactions in addition to those described under inventories above. When these metal futures contracts are closed through receipt or delivery of metal or by entering into an offsetting contract, the resulting profit (or loss) is included in income.

*Property, Depreciation, Amortization and Depletion:* The costs of maintaining and repairing property are charged to operations. The costs of additions and betterments are added to property accounts. The costs of units of property, plant and equipment retired or replaced are credited to property accounts and the corresponding allowances for depreciation, depletion or amortization are removed. Any differences between amounts received and net carrying amounts of the disposals are reflected in operations. Provisions for depreciation, depletion and amortization are computed using either the straight-line, declining-balance or units-of-production methods, at rates believed sufficient to amortize the cost of the asset over its useful life (buildings 30-40 years; machinery and equipment 3-15 years), which is the shorter of the asset's physical life or the economic life of the mine. These rates are subject to periodic review and are revised when deemed necessary to assure that the cost of the respective assets will be written off over their useful lives.

*Exploration Expenses:* Costs incurred in the search for new mining properties are charged against earnings when incurred.

*Development Costs:* Development costs to bring new mineral

properties into production and for major development programs of a special nature at existing mines are capitalized and amortized using the units-of-production method commencing when production begins.

*Income Taxes:* Deferred income taxes are provided for the effect of allowable deductions for depreciation and mine development costs in excess of amounts charged against earnings in the financial statements and certain unrealized metal futures contracts gains. Operating loss carryforwards and investment tax credit carryforwards are considered in the determination of such deferred taxes. Investment tax credits are accounted for by use of the flow-through method.

### NOTE B—INVENTORIES

Inventories consist of the following:

	<u>1980</u>	<u>1979</u>
Finished metals		
and metal products	\$1,113,297	\$196,851
Supplies	<u>262,320</u>	<u>279,787</u>
	<u>\$1,375,617</u>	<u>\$476,638</u>

Uranium ore held in stockpile inventory at the Small Fry Mine in the amount of \$2,492,472 at June 30, 1980 and 1979 is included in other non-current assets since milling arrangements have not yet been made for processing the ore, and the timing of such arrangements is uncertain.

### NOTE C—IDLE FACILITIES

Idle facilities are carried at cost less allowances for depreciation, depletion and amortization. Provisions for depreciation, depletion and amortization are not made while operations are suspended.

Due to the substantial decline in the market price of tungsten, the Company suspended operations at its Tungsten Queen Mine in August 1971. The carrying amount of property, plant and equipment at the mine at June 30, 1980, was \$7,682,436. The current market price of tungsten is considerably higher than those prices received while the mine was in operation. Although it is management's opinion that the investment will ultimately be recovered through future operations or disposition of the property, the timing of any such operations or disposition remains indefinite. Until such time as plans have been finalized to re-open or dispose of the mine, all such property, plant and equipment will be maintained in a standby condition. The cost of maintenance should not be material.

The Company has suspended operations at two other locations with a carrying amount of \$1,720,511 at June 30, 1980 and \$2,123,342 at June 30, 1979. Management is of the opinion that the costs will be recovered through sale of ore stockpiled and future operation or sale of the property.

### NOTE D—INVESTMENT IN JOINT VENTURES AND LIMITED PARTNERSHIP

The following is a summary of the components of the Company's equity in net assets of the joint ventures and limited partnership in which it has investments:

	1980	1979
Current assets	\$1,667,715	\$ 838,315
Properties—net	4,187,434	4,658,244
<b>TOTAL ASSETS</b>	<b>5,855,149</b>	<b>5,496,559</b>
Current liabilities	885,131	2,031,842
Long-term debt	—	104,167
<b>TOTAL LIABILITIES</b>	<b>885,131</b>	<b>2,136,009</b>
<b>EQUITY IN NET ASSETS</b>	<b><u>\$4,970,018</u></b>	<b><u>\$3,360,550</u></b>

During 1980 the Company organized a limited partnership for the purpose of exploring for commercially minable deposits of gold and silver with the objective of developing and operating producing mines from such deposits. The Company serves as the general partner with an interest of 15% and as a limited partner (17%). The Company's investment in the limited partnership at June 30, 1980 is \$1,143,412.

#### NOTE E—FEDERAL INCOME TAXES

During the year ended June 30, 1974, the Company paid a deficiency notice in the amount of \$1,068,190, representing additional federal income taxes assessed of \$901,698, plus interest, for the years ended June 30, 1965 through June 30, 1971. The Company filed claims for refund of amounts paid or such greater amount as may be finally determined. The Internal Revenue Service refused to honor this claim, and the Company filed suit in the United States District Court to recover the payments. The Company has been awarded a judgement to recover \$901,698 plus interest. The Internal Revenue Service has appealed certain portions of the Court's decision to the United States Circuit Court of Appeals. The case was heard on March 11, 1980 and no decision has been handed down.

During the year ended June 30, 1976, the Company received a deficiency notice in the amount of \$630,856 representing additional federal income taxes assessed for the years ended June 30, 1972 through June 30, 1974. On June 11, 1976, the Company filed a petition with the United States Tax Court requesting adjustment of the deficiency notice. This case has not yet been scheduled for trial.

During the year ended June 30, 1979, the Company received a deficiency notice in the amount of \$755,553 representing additional Arizona income taxes assessed for the years ended June 30, 1974 through June 30, 1977. On February 6, 1979 the Company filed a protest to the deficiency notice. The Company is awaiting the outcome of a hearing held with the Arizona Department of Revenue.

While the outcome of the above tax issues is uncertain, management is of the opinion that the ultimate deficiency, if any, will not have a materially adverse effect on the consolidated financial position or results of operations of the Company. Provision has been made in the deferred income tax accounts for the effect of possible adjustments, some of which are in the nature of timing differences.

In 1980 the Company utilized net operating loss and investment tax credit carryforwards in the amount of \$440,084 and \$26,789, respectively, all of which reduced the deferred income tax provision.

Investment tax credits of \$250,955 were used to reduce the 1980 provision for income taxes.

The Company has investment tax credits for income tax purposes in the amount of \$1,015,710 expiring if not utilized as follows: 1981—\$87,583; 1982—\$34,775; 1983—\$218,495; 1984—\$51,944; 1985—\$575,331; 1986—\$47,582.

The reasons for the difference between total tax expense and the amount computed by applying the statutory federal income tax rate of 46% to income before income taxes are as follows:

	1980	1979
Federal tax expense at statutory rate	46%	46%
Statutory depletion in excess of cost depletion	(13)	(23)
Provision for minimum tax	—	4
State income tax less federal tax benefit	2	1
Investment tax credit	(3)	—
	<u>32%</u>	<u>28%</u>

#### NOTE F—LONG-TERM DEBT AND LINES OF CREDIT

The Company elected to redeem the outstanding convertible subordinated debentures as of June 9, 1980 at the redemption price of 102.032% or the conversion price of \$12.35.

Land contracts payable consist of the following:

	1980	1979
9% contract payable \$75,000 October 1, 1980 plus interest; \$102,574, including interest, each October 1 thereafter through 1993	\$1,043,000	\$ —
Other	299,531	238,269
	<u>\$1,342,531</u>	<u>\$238,269</u>

At June 30, 1980 the Company had lines of credit available from commercial banks in the amounts of \$20,000,000 and \$12,500,000, respectively. Both lines are unsecured, are payable on demand, bear interest at the bank's prime rate and expire in 1981 (March and June). There have been no amounts borrowed on these lines during the year.

## NOTE G—CAPITAL STOCK

As of February 22, 1980, the Company declared a 2 for 1 stock split effected in the form of a stock dividend.

Net income per share of common stock has been computed on the basis of the weighted average number of shares outstanding during each year and, when dilutive, additional shares assuming the exercise of stock options. All per share amounts reflect the 2 for 1 stock split.

Net income per share of common stock for 1980 and 1979 would have been \$1.59 and \$1.43, respectively, for net income had the 5¾% convertible debentures due January 15, 1989 been converted on July 1, 1978.

## NOTE H—LEASES AND COMMITMENTS

Total rent expense for all leases amounted to \$402,975 in 1980 and \$406,539 in 1979.

The future minimum rental commitments under non-cancellable equipment leases are not material.

## NOTE I—STOCK OPTIONS

At June 30, 1980, 93,532 shares of common stock were reserved

for issuance to certain officers and employees under the Company's stock option plan for key employees. Of the 93,532 shares reserved for options, 47,332 were covered by options outstanding and 46,200 were available for future grant. Options may be granted at prices not less than market value at date of grant, become exercisable principally in two or more equal annual installments following dates of grant, and expire five years from date of grant. The plan provides that individual options cannot be exercised while any option previously granted at a higher price is outstanding.

In addition, 100,000 shares are reserved for issuance pursuant to a stock option purchase plan for salaried employees (except officers). No options have been granted under this plan at June 30, 1980.

The Company has also granted other options, principally to directors, not under the stock option plan, which are priced at fair market value on the date of the grant and become exercisable principally in three or more equal annual installments following dates of grant, and expire five years from the date of grant.

Option transactions are summarized as follows:

	Stock Option Plans		Other		Total Shares
	Shares	Price	Shares	Price	
Outstanding July 1, 1978	53,200	\$4.56- 9.13	84,000	\$4.56- 9.13	137,200
Year ended June 30, 1979					
Granted	8,000	6.31-10.88	—	—	8,000
Cancelled	(7,400)	5.00-10.88	(20,400)	6.38- 9.13	(27,800)
Exercised	(2,500)	5.00- 6.13	—	—	(2,500)
Outstanding June 30, 1979	51,300	4.56-10.88	63,600	4.56- 9.13	114,900
Year ended June 30, 1980					
Granted	27,800	8.25-24.38	12,000	8.25- 8.88	39,800
Cancelled	(900)	8.88-10.88	(5,000)	4.56- 5.00	(5,900)
Exercised	(30,868)	4.56-10.88	(24,600)	5.00- 8.19	(55,468)
Outstanding June 30, 1980	47,332	6.31-24.38	46,000	6.00- 9.13	93,332
Exercisable June 30, 1980	16,900	6.88- 9.13	17,000	6.00- 9.13	33,900

## NOTE J—RELATED PARTY TRANSACTIONS

Mining operations at the Company's Bluebird Copper Mine, Arizona, are being performed by Anderson Development Corporation pursuant to a mining contract with the Company. Anderson Development Corporation is wholly-owned by Carl Anderson, a principal shareholder of the Company and the father of Maxie L. Anderson, President and Chief Executive Officer of the Company. Maxie L. Anderson is also vice-president of Anderson Development Corporation. Under the terms of the contract, Anderson Development Corporation receives as payments for its services the sum of (i) its actual direct field costs,

(ii) the cost of replacement or renewal of tires on equipment furnished by it, (iii) rental charges for machinery and equipment furnished by it, and (iv) 7% of the cost of direct operating labor (limited to a maximum of \$100,000 in any calendar year), plus 10% of the payments under (iii) above. The payments by the Company to Anderson Development Corporation for the fiscal year ended June 30, 1980, amounted to \$2,266,954 (1979—\$1,330,680) including \$2,054,230 (1979—\$1,215,268) of reimbursable costs, \$79,136 (1979—\$29,566) of rental charges for equipment, and \$133,588 (1979—\$85,846) constituting percentages of certain costs as described above.



## NOTE K—METAL FUTURES CONTRACTS

During 1980, the Company had gains on hedging transactions from metal futures contracts in the amount of \$3,565,373. These gains were realized by purchasing and delivering low priced silver against forward sales previously made at higher prices and by closing contracts with offsetting contracts.

As of June 30, 1980, the Company has open metals futures con-

tracts with an unrealized gain of approximately \$2,500,000 based on the Company's contract prices and market prices at June 30, 1980. Final realization of this amount is not assured because the Company may fulfill these contracts by: 1) delivering production from one or more of its mines; 2) delivering purchased metals against forward sales contracts; or 3) entering into offsetting contracts.

## NOTE L—BUSINESS SEGMENTS AND MAJOR CUSTOMERS

	Year Ended June 30	
	1980	1979
NET SALES TO UNAFFILIATED CUSTOMERS		
Uranium	\$10,435,849	\$24,789,267
Copper	12,403,064	9,125,191
Gold	306,363	—
Other	105,618	3,079,124
TOTAL SALES	<u>\$23,250,894</u>	<u>\$36,993,582</u>
OPERATING PROFIT (LOSS)		
Uranium	\$ 944,056	\$ 5,816,818
Copper	106,757	167,626
Gold	76,905	—
Other	(222,889)	776,800
TOTAL OPERATING PROFIT	904,829	6,761,244
OTHER INCOME		
Uranium royalties	3,577,682	1,704,088
Gain on metal futures contracts	3,565,373	—
Interest and other	2,167,674	799,384
TOTAL OTHER INCOME	9,310,729	2,503,472
OTHER DEDUCTIONS		
Exploration, conservation and maintenance of mining properties	1,102,086	1,479,221
Administrative and general expense	1,919,156	1,463,930
Interest expense	91,963	292,723
TOTAL OTHER DEDUCTIONS	<u>3,113,205</u>	<u>3,235,874</u>
INCOME BEFORE INCOME TAXES	<u>\$ 7,102,353</u>	<u>\$ 6,028,842</u>
IDENTIFIABLE ASSETS		
Uranium (Idle facilities—1980—\$1,720,511; 1979—\$2,123,342)	\$ 9,417,781	\$10,126,231
Copper	4,968,549	5,099,600
Silver	5,432,463	—
Gold	2,183,062	—
Other	466,633	622,934
General corporate assets	22,468,488	15,848,765
Assets of Tungsten Queen Mine held for disposition (see Note C)	17,137,161	16,500,195
	7,682,436	7,682,436
	<u>\$47,288,085</u>	<u>\$40,031,396</u>
DEPRECIATION, DEPLETION AND AMORTIZATION		
Uranium	\$ 132,353	\$ 3,585,940
Copper	1,029,786	970,264
Silver	71,227	—
Gold	4,819	—
Other	22,823	30,736
General corporate assets	115,724	119,947

Continued on next page

## CAPITAL EXPENDITURES

Uranium	\$ 119,259	\$ 149,413
Copper	944,416	258,496
Silver	5,203,691	—
Gold	2,087,071	—
Other	10,689	15,500
General corporate assets	526,455	74,053

Operating profit is total revenue less operating expenses, excluding interest, administrative and general expense, and expenses relating principally to exploration. Identifiable assets by industry include assets directly identified with those operations. General corporate assets consist primarily of cash, marketable securities, and other investments.

The Company has investments in joint ventures involved in domestic exploration for gold, silver, and uranium. (See Note D)

## NOTE M—SUMMARY OF QUARTERLY RESULTS OF OPERATIONS (UNAUDITED)

The following is a summary of unaudited quarterly results of operations for the years ended June 30, 1980 and 1979:

	1980			
	Quarter Ended			
	September 30	December 31	March 31	June 30
Net sales and other income	\$ 8,081,327	\$ 7,264,223	\$ 7,827,139	\$ 9,388,934
Income before income taxes	1,619,306	1,347,614	1,317,110	2,818,323
Net income	1,139,306	927,614	917,110	1,818,323
Net income per common share	<u>\$ .40</u>	<u>\$ .31</u>	<u>\$ .31</u>	<u>\$ .61</u>

	1979			
	Quarter Ended			
	September 30	December 31	March 31	June 30
Net sales and other income	\$11,022,440	\$10,714,006	\$9,370,965	\$8,389,643
Income before income taxes	1,707,539	1,800,024	1,579,389	941,890
Net income	1,182,539	1,200,024	979,389	966,890
Net income per common share	<u>\$ .40</u>	<u>\$ .42</u>	<u>\$ .34</u>	<u>\$ .34</u>

In the quarter ended September 30, 1979, the Company settled long-standing litigation with United Nuclear Corporation (UNC) over royalties from Company properties mined by UNC in the amount of \$1,351,929.

Gains on metal futures contracts in the amount of \$1,145,407 and \$2,419,966 were realized in the quarters ended March 31 and June 30, 1980, respectively.

In 1980 the Company had sales to three major customers as follows: uranium—\$8,793,297; copper—\$6,757,711 and \$5,282,134.

In 1979 the Company had sales to three major customers as follows: uranium—\$12,231,167 and \$9,601,714; copper—\$4,673,594.

Capitalized site evaluation and plant design costs amounting to \$830,320 attributable to processing uranium mine tailings at Durango, Colorado were written off during the fourth quarter of 1979, since the Company suspended the project.

In addition, the effective annual tax rate changed during the year, resulting in an adjustment of the income tax provision during the fourth quarter of 1979.

Stockholders received dividends totaling \$659,426 during the year—about 2 percent of the year-end market price of the common stock.

## THE COMPANY'S CAPITAL STRUCTURE

As of June 30, 1980, the Company had 1,440,000 shares of common stock outstanding.

There are no preferred shares outstanding.

The Company has no long-term debt.

The Company's capital structure is summarized below:

As of June 30, 1980:

Common stock, \$1.00 par value, 1,440,000 shares

Retained earnings

Total

\$ 1,440,000

\$ 1,440,000



## Report of Ernst & Whinney, Independent Auditors

Stockholders and Board of Directors  
Ranchers Exploration and  
Development Corporation  
Albuquerque, New Mexico

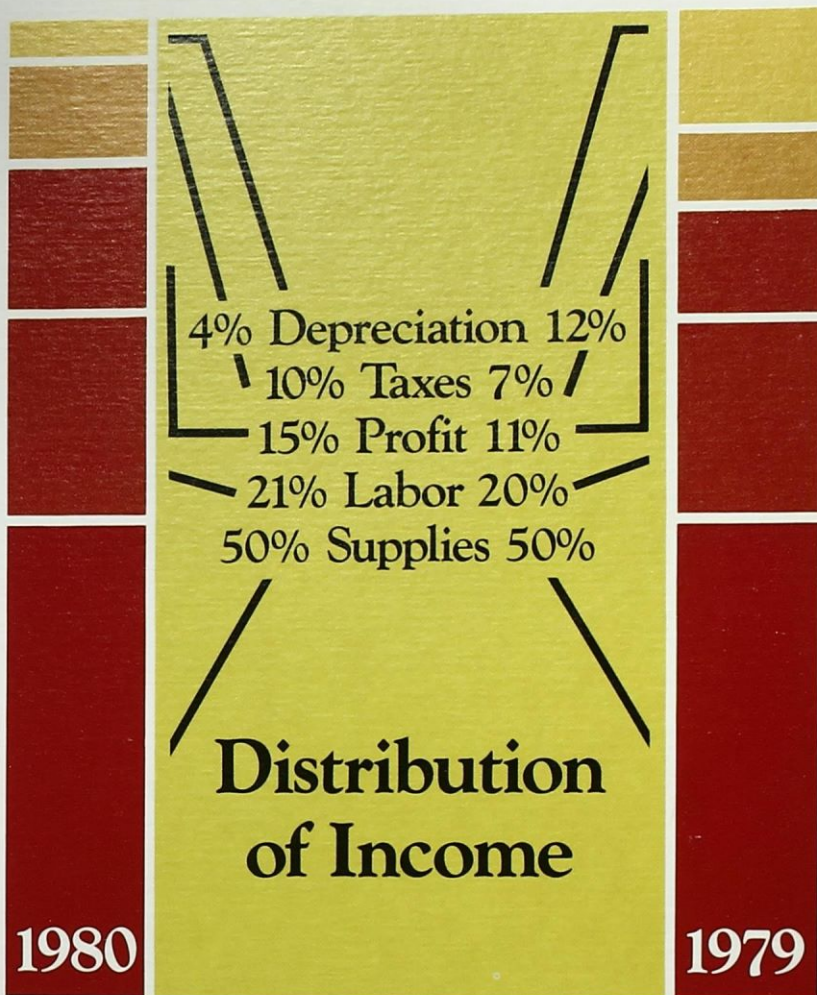
We have examined the consolidated balance sheets of Ranchers Exploration and Development Corporation and subsidiaries as of June 30, 1980 and 1979, and the related statements of consolidated income, stockholders' equity and changes in consolidated financial position for the years then ended. Our examinations 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 more fully in Note C to the consolidated financial statements, the Company has suspended operations at its Tungsten Queen Mine. The carrying amount of property, plant and equipment at June 30, 1980, is \$7,682,436. The ultimate realization of the Company's investment in the mine is dependent upon future economic conditions which will permit recovery through the means discussed in Note C.

In our opinion, subject to the ultimate realization of the investment in the Tungsten Queen Mine, as described in the preceding paragraph, the financial statements referred to above present fairly the consolidated financial position of Ranchers Exploration and Development Corporation and subsidiaries at June 30, 1980 and 1979, and the consolidated results of their operations and changes in their financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

*Ernst & Whinney*

Albuquerque, New Mexico  
August 6, 1980



The Company's gross income totaled \$32,561,623 in 1980. This income was used in the following manner:

\$16,366,917, or 50 percent, went to suppliers for the various goods and services needed to conduct the Company's business.

\$6,662,553, or 21 percent, was spent on labor, including social security and insurance for the Company's approximately 400 employees.

\$3,261,105, or 10 percent, was paid in federal, state, and local taxes.

\$1,376,732, or 4 percent, was provided for depreciation, amortization, and depletion of property, plant and equipment.

\$91,963 was paid in interest.

These expenditures totaled \$27,759,270, leaving a net profit of \$4,802,353, or about 15 percent of the gross income for the year. This amounted to \$1.63 per share on the 2,945,828 shares of common stock held by the Company's approximately 1,450 stockholders of record. Stockholders received dividends totaling \$659,406 during the year — about 2 percent of gross income.

THE 1980 ANNUAL REPORT  
Design and Layout—Mary Garriott  
Artwork—Gene Garriott  
Color Separations—Southwest Color Separations  
Typography—Reay's Typographic Service, Inc.  
Printing—The McLeod Printing Company

Gold Washing Equipment (counter-clockwise from upper right): Sluice box, vibrating table, Goldhound wheel, pan filled with gold from wheel, and scale for weighing washed gold.



## Getting the Gold Out

The washing of gold is perhaps the most romantic sounding practice in all of mining. But as the Company's newly-initiated placer operation in Alaska reveals, the practice is ruled, in a rather inflexible and unforgiving way, by two unique factors: the metal's extraordinary value per unit of volume and its weight —  $1\frac{1}{2}$  times that of lead and twice that of silver. The metal's value dictates that extreme care be taken to separate virtually all the gold — a fraction of a teaspoonful per ton in the Alaskan placers — from the host rock because loss of even a tiny bit of the metal can be extremely costly. On the other hand, the metal's heft is a great advantage, permitting separation by gravity, the technique employed at the placers where a large-scale sluicing operation is underway. There the gold-bearing gravels are bulldozed into a hopper/feeder, fed onto a conveyor, and then onto a triple-deck screen for washing and sizing. Material larger than  $\frac{5}{8}$ -inch-diameter is rejected to a tailings heap while smaller particles are conveyed to the tilted, 41-foot-long,  $12\frac{1}{2}$ -foot-wide sluice box whose bottom is lined with Astro-turf crossed every

$2\frac{1}{2}$  inches by angle-iron riffles. About 3,500 gallons of water per minute — 4.2 million gallons in a two-shift, 20-hour workday — cascade down this sluice, washing away the lighter sand and gravel, leaving the heavy particles of gold and iron, mostly magnetite, lodged in the Astro-turf and riffles. This material is collected and taken to the cleanup house where it is screened and passed across a vibrating table. The vibrations separate the iron and gold as they slide across the tilted, grooved surface of the table, producing high grade gold concentrate, middlings, and tailings. The high grade, which is about 80 percent gold, needs no further handling and is taken to a refinery; the regular concentrate, containing 20 to 40 percent gold, is slowly fed onto a Goldhound Wheel, where a combination of washing and gravity removes the iron while the gold gradually works its way around a spiraling groove and into a hole in the center of the rotating wheel. The middlings are screened and tabled again, while the tailings are panned to see if any grains of gold have been missed.