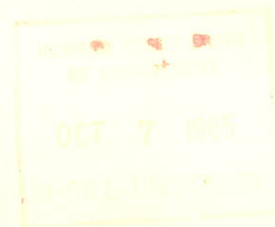


## ECHO BAY MINES LTD.



Echo Bay is a major  
gold producer  
in Canada and the  
United States.





## Corporate profile

Echo Bay owns and operates the Lupin mine, Canada's third largest gold mine, which is expected to produce about 200,000 troy ounces of gold in 1985. Located in the Northwest Territories 56 miles south of the Arctic Circle, Lupin is the northernmost gold mine in North America.

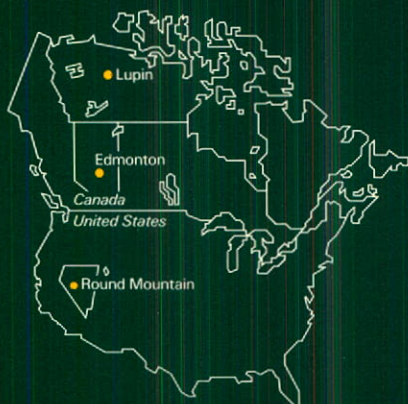
The Company was founded in 1964 when it opened a silver mine at Port Radium, also in the Northwest Territories. During 19 years of operation, until the mine was depleted in 1982, Echo Bay gained extensive experience in Arctic operations and remote site logistics. That experience proved invaluable in planning, building and operating the Lupin mine.

Echo Bay is committed to growth through exploration and acquisition in Canada and in the United States. The Company is conducting exploration programs for precious metal deposits in the Northwest Territories and elsewhere in North America.

In January 1985, Echo Bay made its first acquisition of a producing gold property with the purchase of Copper Range Company which owns a 50 percent interest in and operates the Round Mountain mine, the third largest gold mine in the United States. Round Mountain is an open pit operation, located in Nevada. Echo Bay's share of Round Mountain's 1985 gold production is expected to be about 60,000 troy ounces.

Echo Bay's common shares have been publicly-traded since 1983 when the Company issued new equity to assist in funding the Lupin project. Later that year, IU International Corporation, which had been a shareholder since 1964 and had acquired control of the Company in 1970, distributed all its shares in Echo Bay to IU's shareholders.

Today Echo Bay is an independent Canadian company with more than 31,000 registered shareholders, making it the most widely-held North American gold mining company. With the acquisition of its interest in Round Mountain, Echo Bay becomes the only company with major gold operations in both Canada and the United States. The Company's shares are traded on the Toronto, Montreal and Alberta stock exchanges as well as on the American Stock Exchange, under stock ticker symbol "ECO". An application has also been approved to list on the Paris Bourse, scheduled for April 1985.



### Canadian dollars

Canadian dollars are used in this report unless U.S. dollars are stated.

The exchange rate on February 19, 1985 was  
C\$1.00 = US\$0.742.

### Conversion table

To convert from the measurement units used in this report to metric units the following approximate factors apply:

1 troy ounce = 31.103 grams

1 ton (short) = 0.907 tonne

1 troy ounce per ton (short) = 34.285 grams per tonne

1 foot = 0.305 metre

1 mile = 1.609 kilometres

1 acre = 0.405 hectare

1 gallon (imperial) = 1.2 gallons (U.S.) = 4.546 litres



**Highlights****Operating data**

Gold produced—troy ounces	
Gold reserves—millions of troy ounces	
Breakeven cost per troy ounce	
Production costs	
General & administrative	
Total cash costs*	
Depreciation & amortization	
Total costs*	

1984	1983	Change
<b>181,500</b>	118,000	54%
<b>1.23</b>	1.35	(9%)
<b>US\$165</b>	US\$230	(28%)
<b>33</b>	33	—
<b>198</b>	263	(25%)
<b>55</b>	75	(27%)
<b>US\$253</b>	US\$338	(25%)

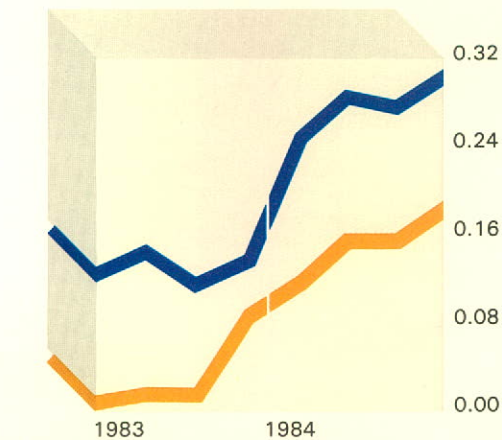
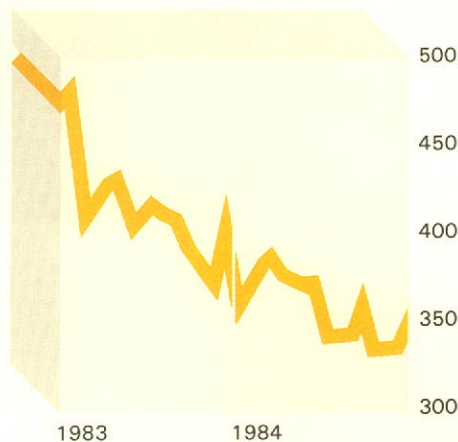
\* Before finance costs and exploration expense

**Financial data**

(millions of Canadian dollars  
except per share data)

Revenue	<b>\$89.3</b>	\$62.7	42%
Net earnings	<b>23.9</b>	9.0	166%
Funds from operations	<b>39.5</b>	20.9	89%
Total assets	<b>184.4</b>	160.4	15%
Shareholders' equity	<b>112.7</b>	50.8	122%
Common share data			
Earnings per share	<b>\$0.64</b>	\$0.14	357%
Cash flow per share	<b>1.13</b>	0.53	113%
Dividends per share	<b>0.11</b>	0.10	10%

Lupin's increased gold production and reduced costs per troy ounce have more than offset declining gold prices.



■ Cash flow  
■ Earnings

*Robert F. Calman, Chairman,  
(left) and John Zigarlick, Jr.,  
President, at the head  
frame of the Lupin mine*



**Echo Bay's first priority is the efficient operation of the Lupin mine.**

**Growth will come through exploration and development programs principally where Echo Bay's resources, infrastructure, and exploration knowledge are advantages.**

**Further growth will be achieved by acquisition in Canada and the United States using the expertise and financial strength gained through Lupin.**



## Letter to shareholders

We are pleased to report that Echo Bay made substantial progress in 1984. Net earnings increased to \$23.9 million (\$0.64 per share) from \$9.0 million (\$0.14 per share) in 1983, despite a decline in the market price of gold to an average of US\$360 per troy ounce for the year, from US\$424 in the previous year.

Revenues increased 42 per cent to \$89.3 million from \$62.7 million in 1983, but operating costs at the Lupin mine increased only 13 per cent to \$38.5 million. The cash breakeven cost for 1984 (excluding finance costs and exploration expense, as well as depreciation and amortization) was US\$198 per troy ounce, compared with US\$263 per troy ounce in the previous year. This makes Echo Bay one of the lowest-cost gold mining companies in North America.

The unit cost reduction resulted largely from the mill expansion completed at Lupin in November 1983 and further increases in production tonnage made during 1984. With these improvements the Company achieved a 54 percent increase in gold production to 181,534 troy ounces for 1984.

### Round Mountain acquisition

Effective January 1, 1985, Echo Bay purchased Copper Range Company from The Louisiana Land and Exploration Company of New Orleans. Copper Range owns a 50 percent undivided interest in and operates the Round Mountain gold mine, a large tonnage, low grade, open pit mining operation located in Nevada. Copper Range also owns or has interests in precious metals exploration properties in Nevada and an inactive copper mining complex in Michigan. Echo Bay acquired Copper Range for US\$55 million and future obligations with an estimated net present value of US\$11 million. In addition, Louisiana Land has retained a three percent royalty based on Echo Bay's revenues from Round Mountain starting 1989.

Round Mountain is the third largest gold mine in the United States. It produced 121,000 troy ounces in 1984, and has in situ gold reserves and mineral inventory of more than 6.7 million troy ounces of which Echo Bay's share will be 50 percent. The cash operating cost at Round Mountain was US\$251 per troy ounce in 1984, and the potential exists to reduce this cost.

### Financial position

In April 1984, Echo Bay issued four million common shares for net proceeds of \$40 million. These funds were used to redeem the Company's \$40 million of 12 percent preferred shares.

An additional 286,000 common shares were issued in November 1984 to holders of "flow-through" units sold to Canadian taxpaying investors in April. The \$5-million proceeds from the sale of these units were used to fund a large portion of Echo Bay's 1984 Canadian exploration program.



*Ore samples being processed in Lupin's assay furnace.*

Shortly after yearend, Echo Bay issued a further 3.6 million common shares with net proceeds of \$35.7 million being used to finance, in part, the Copper Range acquisition.

The remainder of the Copper Range acquisition was financed through the borrowing of 100,000 troy ounces of gold in January 1985 from a Canadian bank. The gold was sold at US\$307 per troy ounce and the proceeds used for a portion of the acquisition. The gold loan is repayable over five years in gold and carries an average interest rate of 1.6 percent, also payable in gold. As Echo Bay is increasing its long-term gold reserves with this acquisition, paying for Copper Range by borrowing gold gives us a natural hedge and a low interest rate.

#### **Lupin reserves**

Due to the much lower production costs achieved at Lupin, Echo Bay has reduced the minimum, or "cut-off" grade used to determine economically recoverable ore from 0.20 to 0.15 troy ounces per ton.

Consequently, the average grade of ore reserves has been reduced to 0.356 troy ounces per ton from 0.396 the previous year. Proven and probable reserves at year-end contained 1.23 million troy ounces of gold.

As there are indications that the ore body continues below the present ore reserve depth limit, a program to deepen the Lupin shaft was started at the end of 1984.

#### **Royalty purchases**

During 1984, Echo Bay acquired both royalty interests held in the Lupin mine by other corporations. Only a Crown royalty, which is effectively a tax on all Northwest Territory mining operations, still exists. The royalty interest held by Inco Limited and Dome Mines Limited, the original property owners, was acquired in August for \$15 million. Later in the year, IU International Corporation's interest was purchased for US\$4.4 million. This interest was created when IU, which was Echo Bay's parent company prior to November 1983, financed a 1982 ore reserve development program.

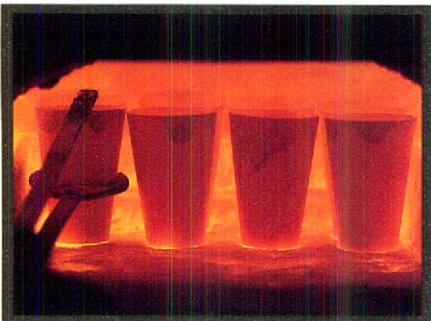
#### **Corporate strategy**

"Echo Bay's first priority is the efficient operation of the Lupin mine."

Managing Lupin ever more effectively remains the most important element of Echo Bay's strategy, and the Company believes it can continue to improve the profit contribution from this core asset. The purchase by Echo Bay of all Lupin's royalty interests underlines our confidence in Lupin and the high priority it has in our plans for the future.

"Growth will come through exploration and development programs principally where Echo Bay's resources, infrastructure, and exploration knowledge are advantages."

As in 1984, most of Echo Bay's 1985 grassroots mineral exploration work will be done in the Northwest Territories. By using its transportation system and Lupin as a base, the Company has a considerable cost advantage in exploring for new ore deposits in the area.





*Bullion bars containing approximately 85 percent gold and 13 percent silver awaiting shipment from the Lupin site.*

As further examples of looking for growth through exploration, the Company entered into four exploration joint ventures during 1984. One of these joint venture properties, the Comaplex gold property 155 miles south-west of Lupin, produced some promising diamond drill intersections. We have mounted our first-ever winter exploration program to better determine the potential of this property. Another, the Congress property in Arizona, will be evaluated in 1985 for its potential as a small gold producer. Shortly after year-end, agreements were signed with Nuinsco Resources Ltd. and Inco Limited to explore their gold properties near Kenora, in northwestern Ontario.

"Further growth will be achieved by acquisition in Canada and the United States using the expertise and financial strength gained through Lupin."

Echo Bay is interested in acquiring existing mining operations and properties in advanced exploration stages. We believe that low gold prices offer an opportunity to acquire these at reasonable cost. Such acquisitions reduce the risk and lead time required to obtain additional production and reserves. Lupin's cash flow gives us the financial strength to finance these acquisitions.

We are not interested in acquisition simply to add production and reserves; we are only interested if they build these on a "per-share" basis.

### **Outlook**

Despite the uncertainty in gold prices, low production costs at Lupin and Round Mountain go a long way to ensuring the Company's continued cash flow and profitability. We do not forecast the price of gold, but we do make considerable effort to lower our cost of producing it. With the increased production rate, Lupin's 1985 gold output is expected to be 200,000 troy ounces. Echo Bay's 50 percent share of Round Mountain production, based on the 1984 total of 121,000 troy ounces, should be approximately 60,000 troy ounces. For both mines, costs per troy ounce in 1985 are anticipated to be slightly lower than 1984's.

We will continue to search actively for acquisitions of potential low cost gold mines during the coming year, and our exploration program will also continue, currently budgeted at \$6.7 million in 1985.

We would like to thank our shareholders for their continued support and our employees for their hard work and dedication in 1984. It is also a pleasure to welcome our new employees at Copper Range.



Robert F. Calman,  
Chairman

John Zigarlick, Jr.,  
President

February 19, 1985.



*Echo Bay is one of the few North American mining companies to extensively use electric hydraulic drilling equipment, here being used for production drilling.*



**"Echo Bay's first priority is the efficient operation of the Lupin mine."**



## Lupin operations

In 1980, Echo Bay began construction of the Lupin mine located in the Northwest Territories 56 miles south of the Arctic Circle. The mine reached commercial production in October 1982.

During 1984, Echo Bay took full advantage of increased production capacity at Lupin, made possible through a mill expansion completed in the last quarter of 1983. What was planned as a 20 percent increase in production capacity has become a 50 percent increase. Average ore milled during the year was 1,485 tons per day, compared with 976 tons in 1983. As a result, 1984 gold production increased to 181,534 troy ounces, from 118,026 in the previous year.

This major increase in production was accomplished without a similar increase in operating costs. Consequently, while tons of ore processed increased by more than 50 percent, total operating costs increased by only 13 percent. The average cash operating cost at Lupin during 1984 was C\$72 per ton, or US\$165 per troy ounce, compared with C\$95 and US\$230 in the previous year.

In addition to achieving higher production levels, the Company was able to further increase the mill's gold recovery rate. The average rate was 95.2 percent during the year, compared with 94.3 percent in 1983.

The grade of ore milled varied from quarter to quarter in 1984, depending on the areas being mined. The average was 0.351 troy ounces per ton, essentially the same as in 1983.

Production levels increased progressively throughout the year, with the mill operating at 1,700 tons per day by December 1984. This was considered to be an exceptional operating rate and the Company has budgeted for an average of 1,550 tons in 1985. This rate should produce approximately 200,000 troy ounces of gold.

### Recovery operations

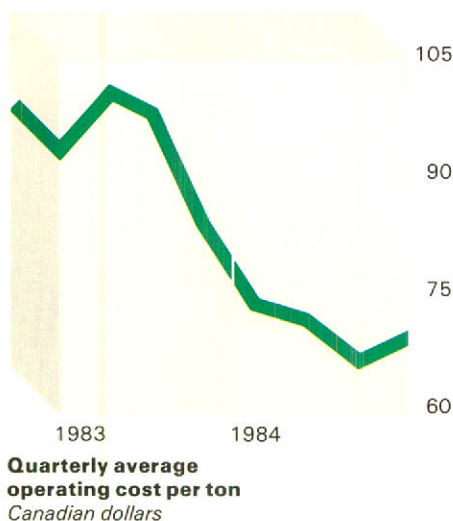
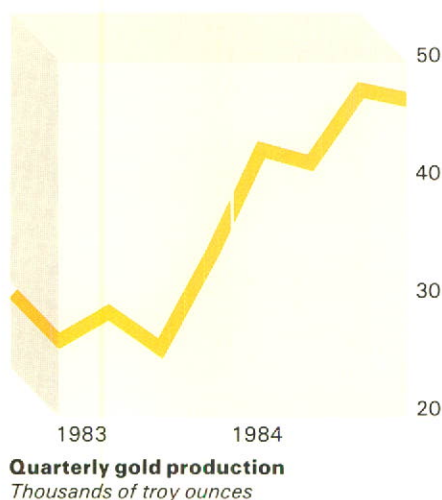
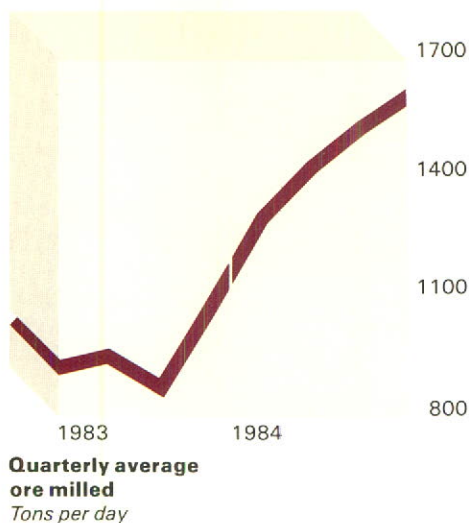
Following the mill expansion completed late in 1983, Echo Bay has continued to make modifications to improve the efficiency and capacity of the facility. The basic process, however, remains unchanged.

After being partially crushed underground, ore is hoisted to the surface and conveyed to the mill. The ore is further processed through a two-stage grinding circuit, reducing it to a fine powder from which the gold can be readily dissolved.

The finely-ground ore is pre-aerated in a lime solution to oxidize some of the ore's chemical-consuming components. The gold is then dissolved by leaching in a solution of sodium cyanide. The gold-bearing solution is separated from the solids by decantation and vacuum filtration and gold is precipitated from the solution by the addition of zinc dust. The precipitate is collected in presses, refined and cast into bullion bars containing approximately 85 percent gold, 13 percent silver and some impurities.







A more effective pre-aeration system was adopted during the year and has led to a reduction in consumption of chemical reagents. A third precipitation press was also added.

### Underground operations

The Lupin ore body occurs in a folded iron formation that has three limbs, resembling a Z-shape, that dips through the ground at a 65 degree angle. Most of the gold is contained in the Centre and the East Zones. Due to its narrow width, lesser amounts occur in the West Zone (see the isometric view of the Lupin ore body, page 9).

Access to the mine is by a shaft presently sunk to a depth of 1,210 feet, and a 15-foot wide ramp, driven from surface to the 820-foot level. The shaft is used for removal of ore and waste as well as the movement of personnel. The ramp, which spirals down next to the orebody, is used primarily for the movement of materials and equipment between levels. As a cost-saving measure, an underground maintenance shop has been constructed at the 560-foot level to service mine equipment.

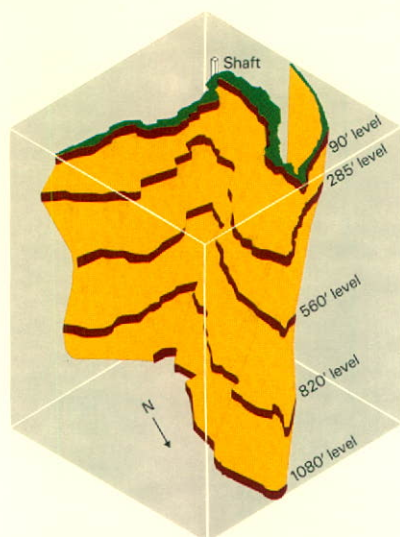
Main haulage levels have been developed on the Centre and East Zones at the 285-foot, 560-foot, 820-foot and 1,080-foot levels, all connected to the shaft. To mine the ore, sub-levels are developed at 66-foot intervals between the main levels using the spiral ramp for access. The Centre Zone has been developed and partly mined down to the 560-foot level and the East Zone to the 285-foot level.

The Lupin deposit, particularly in the Centre and East Zones, is quite wide, allowing the ore to be extracted using a cost-efficient bulk mining method, known as the sub-level, retreat, long-hole stoping method. Rows of vertical holes are drilled from one level to the next and then blasted. When the broken ore has been hauled away, drilling begins on the level above. Mining widths average 30 feet in the Centre Zone, 23 feet in the East Zone, and 6 feet in the West Zone.

Mine development operations in 1984 included a total drift advance of about 14,800 feet, with the main emphasis placed on preparation of the East Zone for production between the 285-foot and the 560-foot levels, and extension of the ramp a further 260 feet in depth to the 820-foot level. Production operations were conducted in the Centre Zone above the 560-foot level and in the East Zone above the 285-foot level.

With the addition of about \$800,000 in new underground equipment, the Company was able to increase 1984 production by 50 percent to 537,000 tons to meet the demands of the expanded surface mill without going from two to three shifts a day.





**Isometric view of the  
Lupin ore body**

During the fourth quarter of 1984, Echo Bay completed preparations for deepening the mine shaft. This program is being carried out in two phases. The first will extend the shaft from its present depth of 1,210 feet to 1,870 feet to confirm that the ore body continues. The second phase, scheduled for completion in early 1987, will involve sinking the shaft to 2,575 feet. The budget for the two phases is \$16 million, of which \$1.8 million was spent during 1984 and \$4.9 million will be spent during 1985. The shaft-sinking project will not interfere with regular production activity.

### **Underground exploration**

Development work during the year permitted access for underground exploration purposes on the 560-foot level to the West Zone and on the 285-foot level toward a mineralized area beyond the East Zone known as the L-19 Zone (see plan of the Lupin ore body, page 17).

Taking rock core samples by drilling from underground to test the West Zone was successful in outlining further gold mineralization. More development work is required before it can be included in proven and probable reserves. As a result of the drilling and the reduction in the cut-off grade, the West Zone has now been shown to have more consistent mineralization than had been expected.

The geology of the L-19 Zone appears complex and Echo Bay set out during 1984 to develop a better understanding of the structure. A drift was mined from the shaft toward the Zone on the 285-foot level, and a diamond drilling point was established. Drilling gave the Company a much better definition of the structure and confirmed the existence of mineralization, but has not yet resulted in an increase in reserves.

During 1985, the Company plans to do more underground exploration on the East, West and L-19 Zones. In connection with the shaft-sinking program, additional work will be done to establish the continuation of the Centre Zone.

### **Ore reserves**

Substantially lower operating costs allowed the Company to reduce its minimum, or cut-off, grade for determining ore reserves at Lupin from 0.20 troy ounces per ton to 0.15. This cut-off grade is based on current production costs and an assumed gold price range of US\$300-\$400 per troy ounce. Mineralization that was upgraded as a result of this change, plus ore proven up during the year, slightly exceeded the total tonnage mined in 1984. As this mineralization was at a lower grade, the average grade of the reserves at year-end declined to 0.356 troy ounces per ton. The gold content of the ore reserves is 1.23 million troy ounces.



*The mine superintendent and a shift boss meet underground to discuss the production schedule.*

One of the other benefits of reducing the cut-off grade is that the ore in the West Zone is now considered to be more consistent. Although this zone is not as wide as the Centre and East Zones, the Company now believes that bulk mining methods can be used to mine this section.

#### **Proven and probable ore reserves at December 31, 1984**

	Tonnage (short tons)	Average grade (troy oz/ton)	Gold content (troy ozs)
Centre Zone	1,802,200	0.392	706,800
East Zone	1,153,400	0.302	348,300
West Zone	431,500	0.351	151,500
Broken Ore	75,600	0.324	24,500
<b>Total 1984</b>	<b>3,462,700</b>	<b>0.356</b>	<b>1,231,100</b>
Total 1983	3,409,300	0.396	1,348,900

In addition to the above reserves, further gold mineralization has been identified underground. This, however, requires more development before it can be classified as reserves. The ore body, at least in the Centre and West Zones, is believed to continue below the present reserve depth of 1,312 feet. In fact, one previous diamond drill hole intersected gold mineralization at 1,535 feet. The shaft-deepening program currently underway should add to reserves in 1986 and further in 1987.

#### **Lupin workforce**

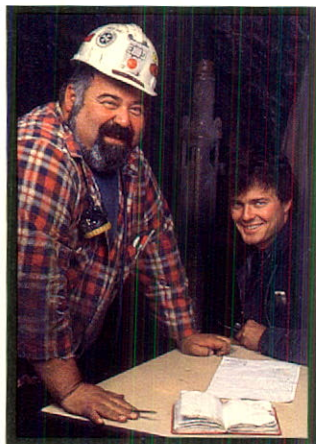
In addition to the underground mine and recovery plant, the Lupin site includes all the facilities required to support a totally isolated camp.

The Lupin workforce totals approximately 300 people working on two rotation schedules: two weeks in and two out for surface employees, and four weeks in two out for underground workers who have a regulated shorter week of 56 hours. About 170 people are on site at any one time.

A portion of the cost savings Echo Bay achieved at Lupin during 1984 is attributable to a Company incentive program, which rewards employee groups for productivity improvements and cost savings. Employees can earn up to an additional 10 percent of their base earnings under this program.

#### **Transportation**

Throughout its 21-year history, Echo Bay has found ways to overcome the logistical problems created by remote Arctic mine locations. An aircraft-oriented company by necessity, Echo Bay has a level of transportation expertise that makes it unique among the world's mining companies.





*The Lupin mine depends on the regular flights of Echo Bay's Boeing 727 aircraft to rotate personnel and to transport supplies and consumables to the site.*

As this report went to press, most of the diesel fuel, chemicals and non-perishable supplies required at Lupin during 1985 were being hauled by tractor-trailer to the mine site over the Company's 372-mile winter ice road. It is the third year that Echo Bay has operated the winter road, which traverses 330 miles of frozen lakes and 42 miles of bush road linking one lake to the next.

Expensive to operate for only 10 weeks each year, the winter road is still a more economical way to supply Lupin than by air transport. The road was reopened in 1984 at a cost of about \$500,000, but Echo Bay estimates that the 700 truckloads of supplies delivered to Lupin saved the Company about \$3.5 million. During 1985, it is expected that about 800 truck loads of supplies will be delivered to Lupin with a cost saving of \$4 million. In addition, seven tractor-trailer loads of supplies were delivered during January 1985 to the Comaplex property exploration camp, using a separate winter ice road.

With the success of the winter road, Echo Bay no longer required the Hercules C-130 transport aircraft which played such an important part in the development and construction of Lupin. It was sold for a net gain of \$1.1 million in December 1984. The Company has also leased its Convair 640, which was used to deliver supplies and personnel to Lupin in previous years. The Company's principal operating aircraft is now a Boeing 727 aircraft, which is more cost-effective than the Convair. The leased 727, which is fitted with a cargo door, can carry 35,000 pounds of freight, or up to 117 passengers, or a combination of both.

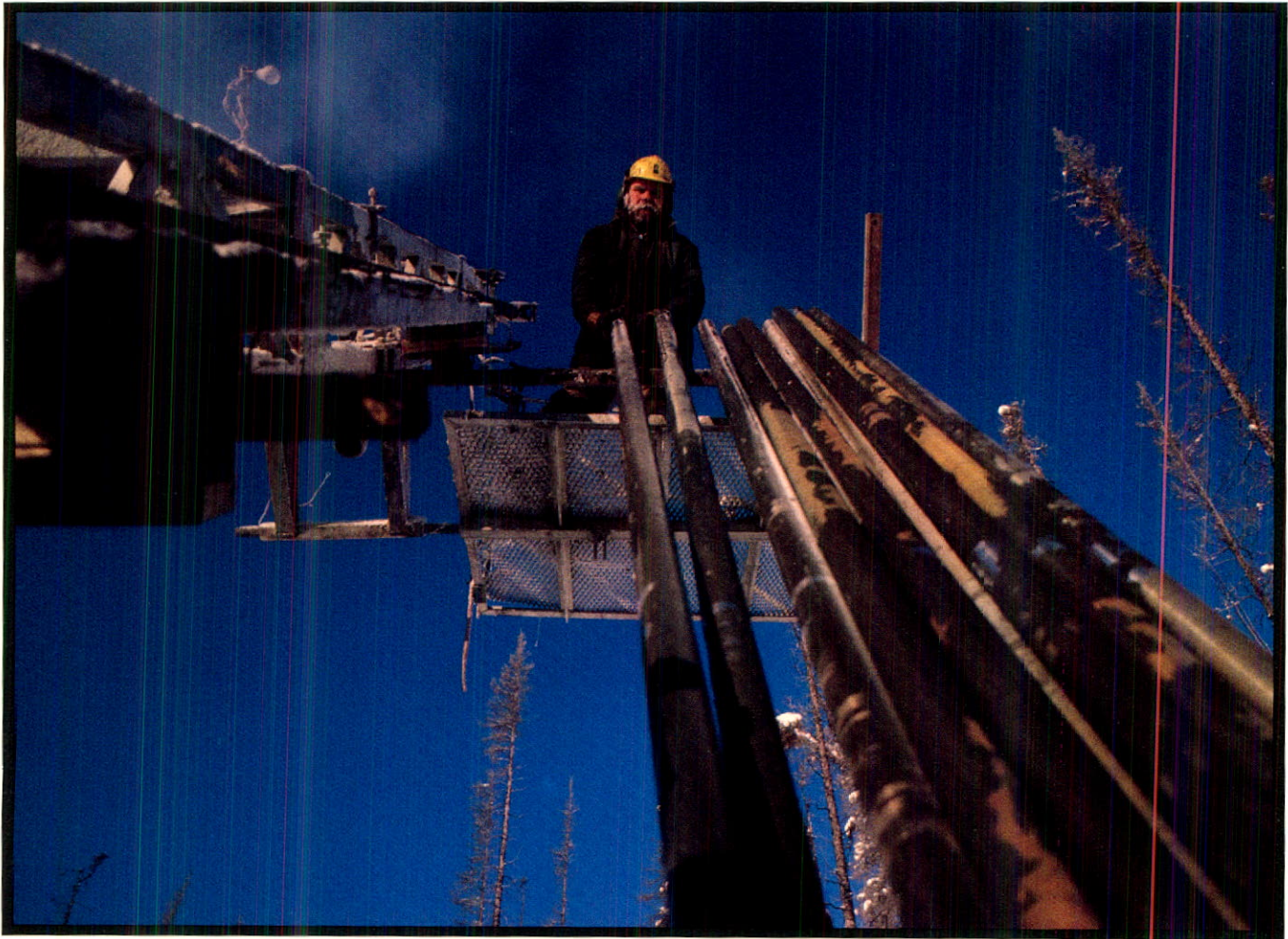
### **Capital expenditures**

The Company's capital spending on the Lupin mine during 1984 was \$8.2 million. These funds were used for a number of purposes, including shaft-sinking, underground equipment purchases, extension of the airstrip, mill improvements, and initial construction work on a new recreation centre for employees. About \$800,000 of this amount was spent on environmental projects, which included raising the height of the tailings dams.





*Drill rods containing core are extracted after completion of a diamond drill hole on the Comaplex property during the 1985 winter exploration program.*



**"Growth will come through exploration and development programs principally where Echo Bay's resources, infrastructure, and exploration knowledge are advantages."**



## Exploration

During 1984 Echo Bay conducted its most active precious metals exploration program to date, spending \$6.6 million on four joint venture properties and on three Echo Bay projects in the Northwest Territories. The 1985 program is budgeted at \$6.7 million.

Most of Echo Bay's grassroots exploration work will continue to be done within a 200-mile radius of Lupin. The Company has a number of advantages in the area, including extensive expertise with the logistics of finding and developing properties in remote Arctic locations.

Lupin also has its own fire assay facilities, which process most of Echo Bay's exploration samples from the region. Rather than waiting two to three weeks for assay results as other companies do, Echo Bay exploration teams can get the information in a few days. The Company is able to react quickly to results.

### Lupin property

During 1984, the Company spent \$1.4 million on ten exploration programs carried out on the Lupin property, which consists of the mining lease and four adjacent claims covering 16,600 acres. The focus was to explore for mineralized iron formations similar to those at the Lupin mine.

Detailed surveys were followed by the diamond drilling of 28 holes for a total of 10,022 feet during the year. Diamond drilling produces core samples that can be examined by geologists and assayed for mineralization. Two of these holes, located 1,500 feet north of the mine shaft, had values of 0.20 troy ounces per ton over a width of 36 feet and 0.14 troy ounces over 11.8 feet. These programs added considerably to the Company's knowledge of the Lupin property geology. It is now known that the iron formation which hosts the Lupin gold deposit continues north of the previously known area (see plan of the Lupin ore body, page 15). During 1985, Echo Bay plans to drill additional holes on the property.

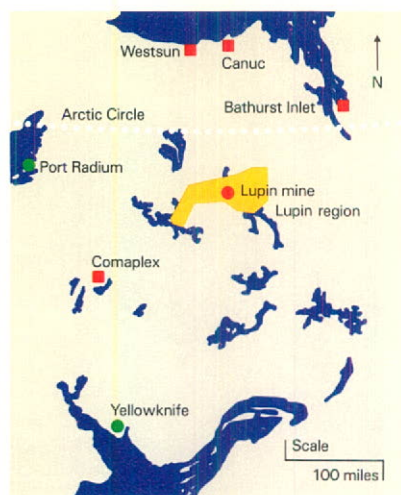
### Lupin region

In addition to the Lupin property, Echo Bay holds seven groups of claims totalling 122,075 acres in the 1,550 square mile area described as the Lupin region. 1984 exploration activities on these claim groups consisted of a systematic evaluation of some of the 82 previously discovered gold occurrences at a total cost of \$1.4 million.

This evaluation included various exploration techniques to discover the presence and extent of gold mineralization. The work provided Echo Bay with a more detailed understanding of the area, and gave a clearer picture of where further work should be carried out.

An additional 37 gold occurrences were discovered. The Company also conducted selective diamond drilling on three previously discovered occurrences with discouraging results. Other occurrences will be drilled in 1985.





**Northwest Territories  
Exploration map**

### Comaplex property

In June 1984, Echo Bay entered into a joint venture agreement with Comaplex Resources International Ltd. and Petromet Resources Ltd., to explore the Kim claims and certain identified anomalies in the area. Echo Bay can earn a 75 percent interest in the original claims and 80 percent in any new claims. The property is located about 130 miles north of Yellowknife and 155 miles southwest of Lupin. It is accessible by winter ice road from Yellowknife and seven truckloads of equipment and supplies were delivered to the site in January 1985.

Since Echo Bay signed the agreement, six more claims have been staked by the joint venture. The property now totals 15,705 acres.

As the property was acquired late in the summer exploration season, only four diamond drill holes were completed, totalling 1,000 feet (see plan of drill program, page 15). All, however, intersected good gold mineralization.

### Drill hole intersections

Hole number	Interval (feet)	Grade (oz/ton)	Width (feet)
84-1	83.0-119.7	0.244	36.7
84-2	123.0-163.6	0.326	40.6
84-3	185.0-188.3	1.660	3.3
	235.0-249.0	0.107	14.0
	281.5-282.8	7.230	1.3
84-4	148.0-161.7	0.118	13.7

While these results are very encouraging, considerably more work is required on the property to determine the significance of the mineralization.

A winter exploration program, budgeted at \$1.4 million, began in January 1985 to continue drilling the assumed mineralized zone, and to test-drill through the ice some electromagnetic conductors identified under Lex Lake.

### Coronation Gulf properties

During March 1984, the Company entered into two separate joint ventures to explore properties near the Northwest Territories Arctic coast. Under an agreement with Canuc Resources Inc., Echo Bay spent \$1.7 million exploring a gold property held by Canuc located about 150 miles north of Lupin. Diamond drilling in prior years had established interesting gold mineralization.

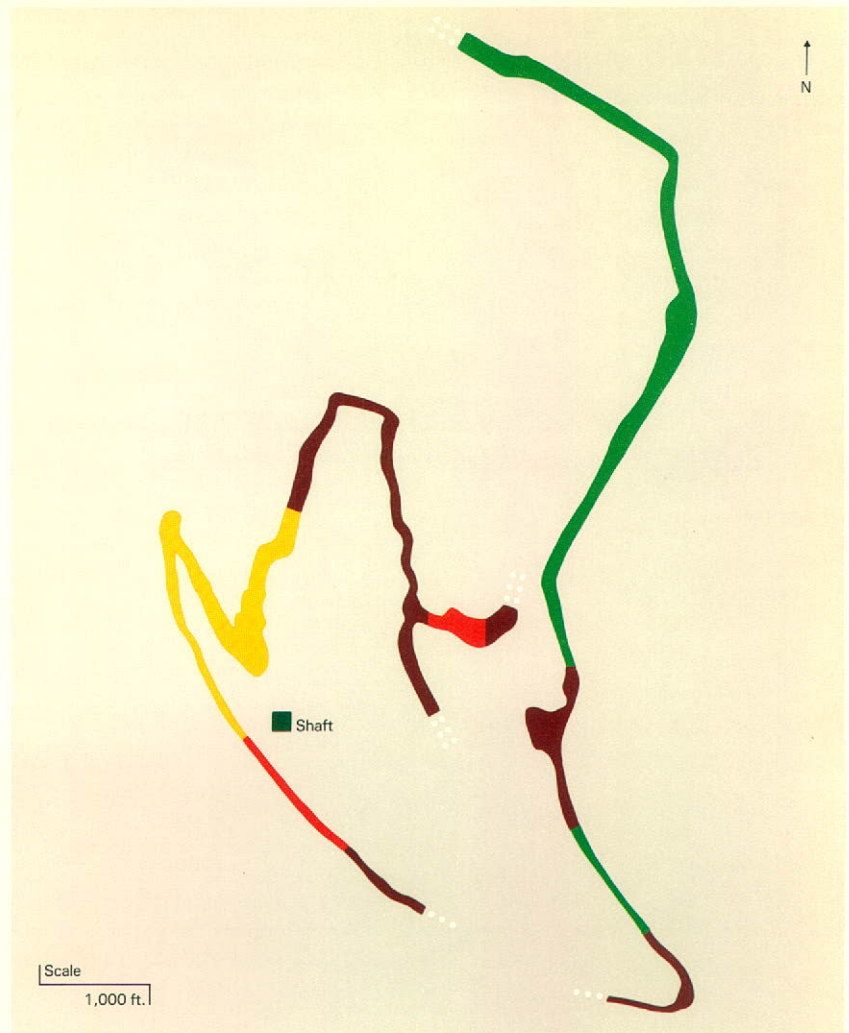
The second joint venture was with Westsun Petroleum & Minerals Ltd. to explore Westsun's Coronation Gulf silver prospect 25 miles west of the Canuc property. Previous surface sampling indicated high-grade silver assays. The Company spent \$300,000 on diamond drilling, prospecting and geological mapping on the property during the 1984 exploration season.

Exploration results on both properties were not encouraging, and Echo Bay has decided to forego its interest in the Canuc and in the Westsun joint ventures.

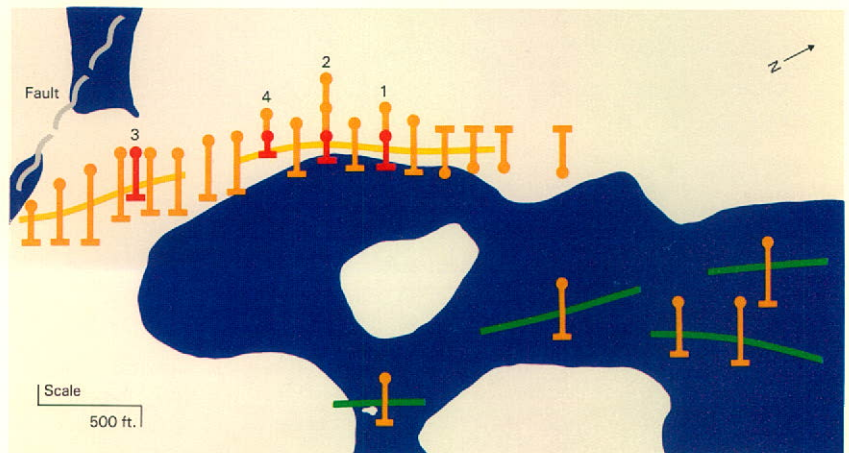


**Plan of Lupin geology**

- Ore body
- Gold mineralization
- Iron formation previously discovered
- Iron formation confirmed 1984


**Comaplex property**  
**Proposed 1985 drill program**

- Assumed mineralized zone
- 1984 drillholes
- Proposed drillholes
- Electromagnetic conductor



*A Company geologist taking rock samples for analysis while prospecting near the Arctic coast.*

### **Bathurst Inlet**

Attracted to the Bathurst Inlet area by the similarity of its geology to Lupin's, Echo Bay conducted a reconnaissance program, followed by some prospecting work, during the year. A number of interesting gold-bearing iron formations were located, and the Company staked three groups of claims totaling 22,800 acres. These will be explored in greater detail in 1985.

### **Kenora properties**

Early in 1985, the Company entered into agreements with Nuinsco Resources Limited and a subsidiary of Inco Limited relating to the exploration of three gold properties near Kenora, in northwestern Ontario. All three have established gold mineralization.

With Nuinsco, Echo Bay will earn shares as it finances exploration work and will later have the option to acquire a controlling interest in the company. Under the Inco agreement, Echo Bay can earn up to a 49 percent interest in the property by financing certain exploration work.

The proposed 1985 exploration program includes extensive diamond drilling in order to better delineate the gold mineralized zones and possibly establish ore reserves. The program for the three properties is budgeted at \$1.5 million.

### **Nevada properties**

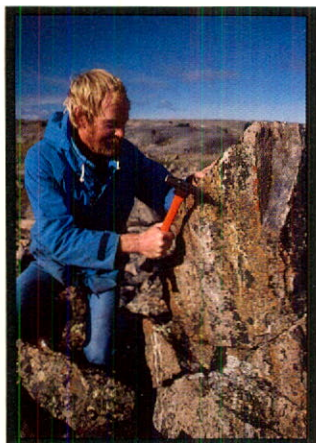
The acquisition of Copper Range Company has given Echo Bay an interest in a number of precious metals properties in Nevada. In connection with the Round Mountain joint venture, Copper Range manages the exploration of an area of mutual interest surrounding the mine. During 1984, active exploration work was conducted on seven properties, three of which had positive results:

- The Jefferson Sediments property adjoins Round Mountain to the northeast. Drilling has partially defined two zones containing gold and silver values. Additional drilling is required to further test these.

- The Jefferson Volcanics property adjoins the Jefferson Sediments property six miles east of Round Mountain. On the basis of 100 rotary drill holes (which produce chip samples for examination and assay) and 11 diamond drill holes, Copper Range estimates that one zone contains 9.6 million tons of mineralization averaging 1.31 troy ounces of silver per ton and 0.009 troy ounces of gold per ton. This zone has not yet been fully defined. A smaller, partially-outlined zone shows mineralization, and the potential exists for other mineralized zones on the property.

- Corcoran Canyon is located 16 miles to the east of Round Mountain. Rotary drilling has identified silver values in one zone, and other similar zones have been located. Further drilling is required to delineate the mineralized zone and to test the other zones.

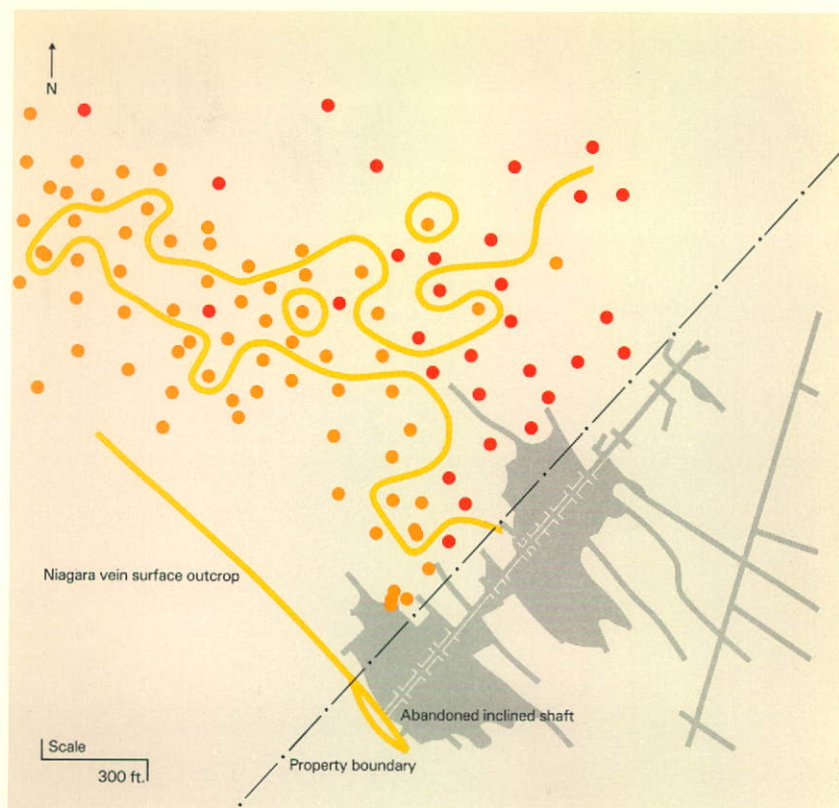
Aside from its 50 percent interest in the Round Mountain partnership properties, Copper Range has precious metal properties of its own located in Nevada. Echo Bay's 1985 program will be to evaluate these.





**Congress drillhole location plan**

- Echo Bay 1984 drillholes
- Previously drilled holes
- Outline of mineralized zone
- Mined area

**Congress property**

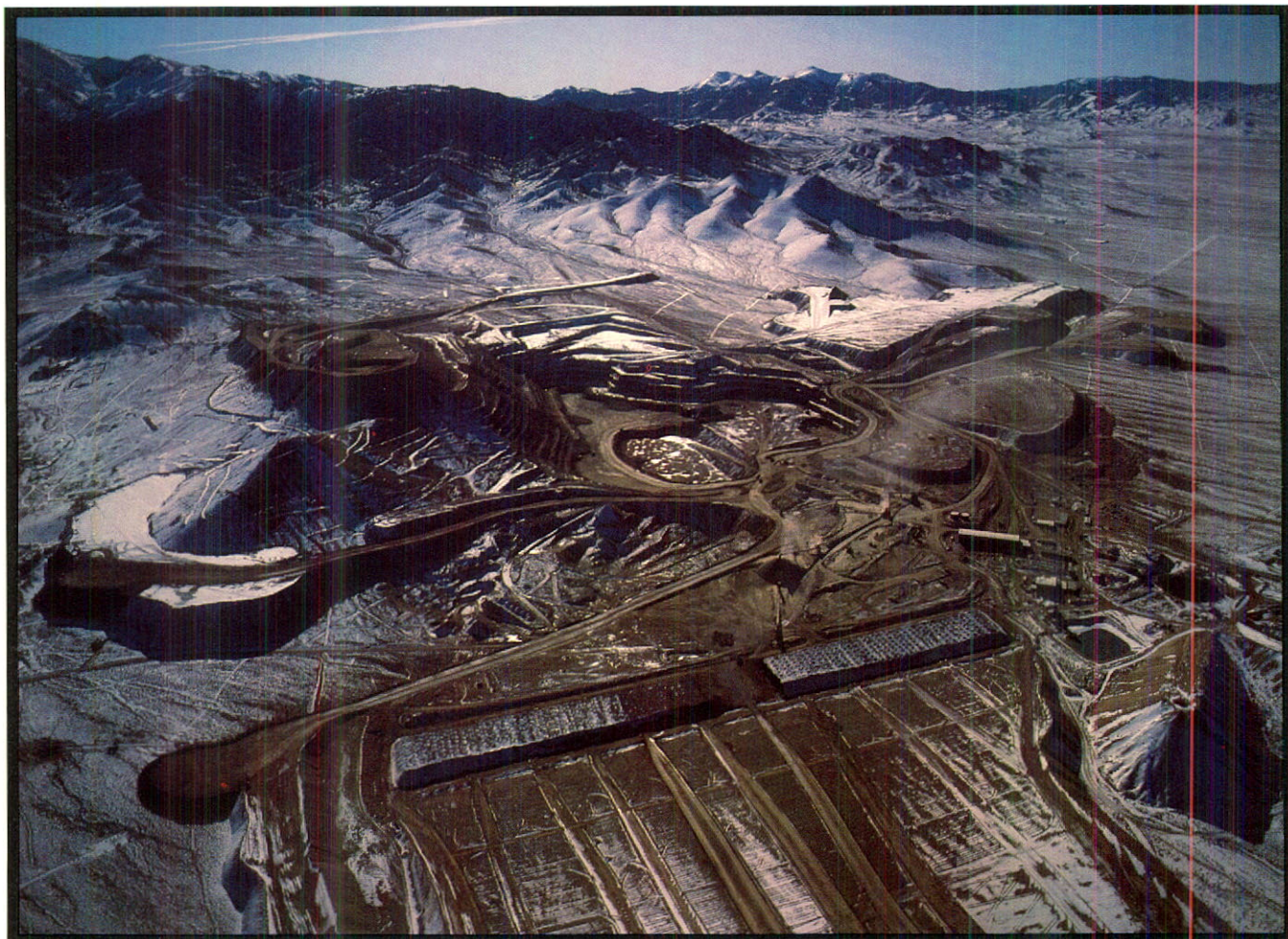
Through Echo Bay's Denver exploration office, the Company entered into an agreement with a subsidiary of Magic Circle Energy Corporation to explore the Congress property. Echo Bay can earn a 51 percent interest in this Arizona property, located about 65 miles northwest of Phoenix, by spending US\$7.3 million on the property by June 1988.

The property is located in an area that had been mined at the turn of the century. The mineralization of interest to the Company is located in the Niagara Vein which dips at about a 40 degree angle from the surface.

During 1984, Echo Bay spent US\$482,000 on a drilling program to confirm the presence of mineralization and further delineate the zone. Thirty holes were drilled for a total of 29,370 feet. A number of holes showed good gold values (see Congress drill plan, page 17).

In 1985, Echo Bay plans a preliminary feasibility study to determine the economics of bringing a small mining operation into production.

*Aerial view of the Round Mountain open pit gold mine in which Echo Bay acquired a 50 percent interest in January 1985.*



**"Further growth will be achieved by acquisition in Canada and the United States using the expertise and financial strength gained through Lupin."**



## Round Mountain

In January 1985, Echo Bay took its first major step toward increasing precious metals production and reserves. The Company purchased Copper Range Company, the mining subsidiary of a U.S. oil and gas producer, The Louisiana Land and Exploration Company of New Orleans, for US\$55 million and future obligations which have an estimated net present value of US\$11 million. In addition, Louisiana Land has retained a three percent royalty based on Echo Bay's revenue from the Round Mountain gold mine. This will start in 1989 and will be reduced to 1½ percent after US\$75 million has been paid to Louisiana Land.

Copper Range's most important asset is a 50 percent interest in the Round Mountain project, which is the third largest gold mine in the United States. Round Mountain is located in central Nevada and has been operated by Copper Range since start-up in 1977. The other partners, each with a 25 percent interest, are Felmont Oil Corporation (a subsidiary of Homestake Mining Company) and Case, Pomeroy & Company Inc.

In 1984, Round Mountain processed 12,496 tons of ore per day, producing 121,014 troy ounces of gold. The average production cost per troy ounce, excluding depreciation and amortization, was US\$251. The mining operation is located within a few miles of a major interstate highway and electrical supply.

Round Mountain is a large-tonnage, low-grade deposit. It was estimated by independent geological engineers to have proven and probable ore reserves at the end of 1984 of 42 million tons, with a gold content of 1.8 million troy ounces (0.043 troy ounces per ton). In addition, there is a gold mineral inventory of 125 million tons, containing 4.9 million troy ounces, which preliminary testing indicates can be extracted by several methods. Further metallurgical test work is required before the inventory can be considered for classification as ore reserves.

Round Mountain's management have remained with the operation. Their extensive knowledge of open-pit, heap-leaching methods adds a further dimension to Echo Bay's technical resources.

### Mining methods

The low grade nature of the deposit requires that high volume, low-cost mining and recovery methods be used. Round Mountain is currently mined using large-scale open pit methods, with a heap-leaching process being used to recover the gold.

The pit is developed by blasting a series of benches, each about 35 feet in height. Ore and waste blasted from the pit wall are removed by trucks. After assaying, ore containing more than 0.015 troy ounces of gold per ton is designated for the recovery process.

Lower-grade material is stockpiled for possible later treatment and material containing less than 0.010 troy ounces of gold per ton is trucked to the waste dump. On average, about three tons of waste are removed for each ton of ore.

After crushing, the ore enters the heap-leaching gold recovery process. In this method, ore is heaped to a height of up to 30 feet on a segment of an asphalt leach pad that is 2,500 feet long and 280 feet wide. The pad is



*More than 12,000 tons of ore are extracted each day from the Round Mountain open pit mine.*

divided into 24 segments and has a total capacity of 740,000 tons. At any given time about 19 pad segments are in the leach cycle and the remaining segments are being loaded or unloaded.

A weak cyanide solution is dispersed over the heaped ore. As this seeps through the ore, it leaches (or dissolves) a large portion of the gold content. The solution is captured through drains at the base of the ore pile. Subsequently, the pile is washed, drained, and removed from the pad to the tailings dumps. The leach cycle currently takes about 44 days and the process is environmentally secure.

Gold is removed from the solution, recovered by electrolysis and then is fire-refined to produce bullion that is approximately two-thirds gold and one-third silver. This is later commercially refined.

During 1984, use of the heap-leach process resulted in a gold recovery rate of 66.7 percent. Improvements are being considered that could increase this rate.

### Development plans

Echo Bay plans to continue Round Mountain's current operating procedures, but will evaluate means of improving production and recovery rates, and reducing operating costs. A substantial increase in production is one way to reduce the unit cost of production.

Echo Bay intends to institute a comprehensive metallurgical test program to evaluate various methods of achieving production from the mineral inventory, particularly Type II, that will emphasize heap-leaching methods.

### Ore reserves and mineral inventory

December 31, 1984

	Tonnage (short tons)	Average grade (troy oz/ton)	Gold content (troy ozs)
Ore Reserves			
Type I Proven	38,000,000	0.043	1,634,000
Probable	4,000,000	0.043	172,000
<b>Total</b>	<b>42,000,000</b>	<b>0.043</b>	<b>1,806,000</b>
Mineral Inventory			
Type II	111,000,000	0.039	4,329,000
Type III	12,000,000	0.040	480,000
Type IV	2,000,000	0.066	132,000
<b>Total</b>	<b>125,000,000</b>	<b>0.040</b>	<b>4,941,000</b>

In addition to the mineral inventory, there are surface placer deposits and various stockpiles of lower-grade material (see outline of main mineralized zones and the schematic cross section of the mine, p.21).

### White Pine complex

Included in the assets of Copper Range, is the inactive White Pine copper complex located in the upper peninsula of Michigan. The complex consists of an underground copper mine, 25,000 ton per day mill, smelter, power-house, associated surface and underground mining equipment, and a new refinery which is currently leased from a Louisiana Land subsidiary.

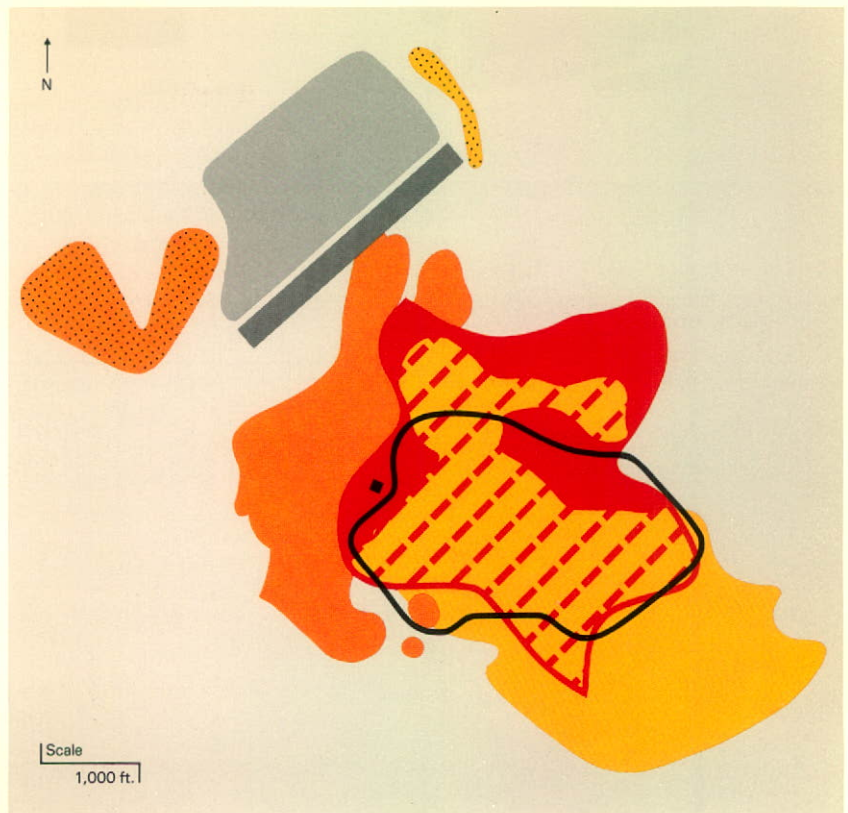
White Pine was closed in 1982 after a prolonged period of low copper prices. Echo Bay currently is considering several alternatives for White Pine, including sub-leasing the refinery.





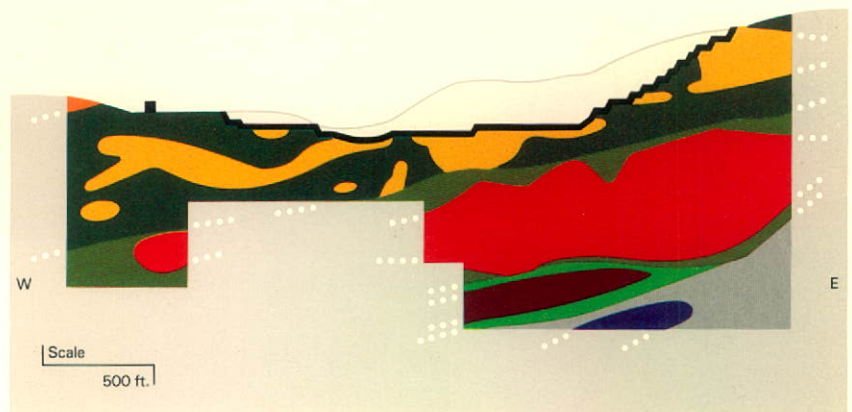
### Round Mountain Mine Outline of mineralized zones

- Type I ore
- Type II mineralization
- Placer
- Placer tailings
- High grade tailings
- Heap leach pad
- Tailings
- Primary crusher
- Current pit outline



### Round Mountain Mine Schematic cross-section

- Mineralized zones
- Type I
  - Type II
  - Type III
  - Type IV
  - Placer
- Various rock units
- Densely welded tuff
  - Poorly welded tuff
  - Lithic tuff
  - Paleozoic metasediments
- Original surface
- Current pit outline
  - Primary crusher
  - Unexplored area



*Satellites are the only communications link for the remote Lupin mine site, near the Arctic Circle.*



**Lupin's increased gold production and reduced costs per troy ounce have more than offset declining gold prices.**



## Financial review

In 1984, net earnings increased to \$23.9 million from \$9.0 million the previous year due to higher gold production and a lower unit cost per ounce. This was despite a 15 percent decrease in the average market price of gold to US\$360 per troy ounce, from US\$424 in 1983.

Net earnings applicable to common shares after payment of preferred dividends were \$22.0 million in 1984 (\$0.64 per share) compared with \$4.2 million (\$0.14) in 1983.

Revenues increased to \$89.3 million, based on 179,315 troy ounces of gold sold at an average price of US\$380 per ounce, compared to revenues of \$62.7 million in 1983 when 118,750 ounces were sold at an average of US\$421.

### Results of operations

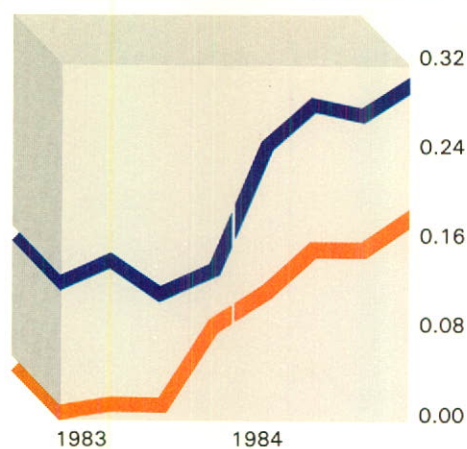
(thousands of Canadian dollars  
except per share data)

Year ended December 31	1984	1983
Revenue		
Gold operations	\$87,144	\$62,533
Other	2,116	214
	<b>\$89,260</b>	\$62,747
Costs and expenses		
Cost of sales	\$38,454	\$34,000
Depreciation and amortization	13,014	11,031
Other	10,214	7,809
	<b>\$61,682</b>	\$52,840
Earnings before income taxes	<b>27,578</b>	9,907
Deferred income tax	<b>3,698</b>	934
Net earnings	<b>23,880</b>	8,973
Dividends on redeemable preferred shares	<b>1,875</b>	4,800
Net earnings applicable to common shares	<b>\$22,005</b>	\$ 4,173
Net earnings per common share	<b>\$ 0.64</b>	\$ 0.14

The cash break-even cost for 1984 was US\$198 per troy ounce compared with US\$263 during 1983. This cost excludes finance costs and exploration expense, as well as depreciation and amortization. The lower cost was primarily a result of higher production volumes without proportionate increases in labor, transportation and other fixed costs.

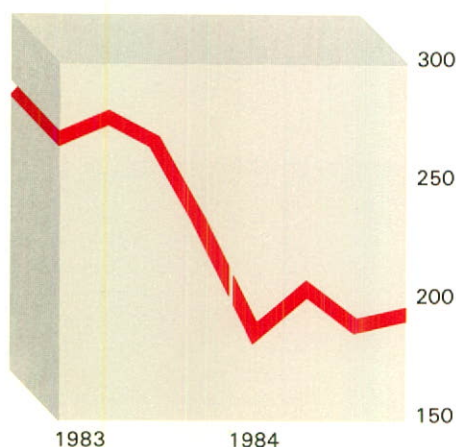
Redemption of the Company's preferred shares in May 1984 has eliminated the preferred dividend requirement. Prior to redemption, preferred dividends of \$1.9 million were paid, compared with \$4.8 million in 1983. The redemption had the effect of passing higher net earnings through to the common shareholders.

During the last quarter of 1984, Echo Bay sold its Hercules C-130 transport aircraft for \$8.6 million, realizing a pre-tax net gain of \$1.1 million. In the same quarter, the Company recognized an exploration write-off of \$1.7 million before taxes in connection with work done on the Canuc and Westsun properties in the Northwest Territories. These projects have been discontinued.



**Quarterly earnings and cash flow per common share**  
Canadian dollars

■ Cash flow  
■ Earnings



**Quarterly average cash breakeven cost\***  
U.S. dollars per troy ounce

\* Excludes finance costs and exploration

### Financial condition and liquidity

Maintaining a strong financial position and good level of liquidity are important priorities at Echo Bay. These give the Company the financial flexibility to pursue corporate opportunities as they arise, and help to insulate it from outside forces it cannot control, principally fluctuations in the gold price.

At year-end 1984, common shareholders' equity accounted for 65 percent of total capital, and long-term debt for 5 percent. This debt, \$9.5 million at the end of 1984, was incurred primarily in connection with the purchases during the year of royalty interests held in the Lupin ore body.

During each of the past three years, working capital has increased and at year-end 1984 was \$5.3 million, an increase of \$2.6 million over the previous year's.

### Copper Range acquisition

Echo Bay Inc., a wholly-owned U.S. subsidiary of the Company, acquired all the shares of Copper Range Company on January 11, 1985 from The Louisiana Land & Exploration Company, for US\$55 million in cash and future obligations with an estimated net present value of about US\$11 million. The extra costs are associated with the inactive White Pine copper complex. In addition, Louisiana Land will receive a 3 percent gross revenue royalty from precious metals production in Nevada, including Round Mountain. The royalty applies to production after January 1, 1989 and will be reduced to 1.5 percent after US\$75 million has been paid.

Funded in January 1985 through a common share issue and a gold loan, the purchase of Copper Range substantially altered Echo Bay's capital structure. The accompanying table shows the effect the acquisition financings would have had on Echo Bay's invested capital if they had been completed prior to the end of 1984.

### Capitalization

Adjusted for Copper Range acquisition finance  
(thousands of Canadian dollars)  
December 31, 1984

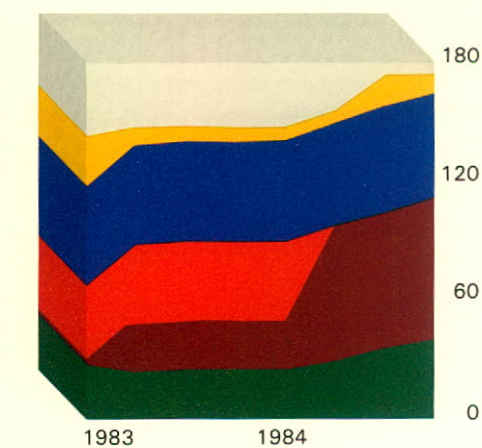
	Before	Adjusted
Long-term debt	\$ 9,515	\$ 9,515
Deferred revenue	40,000	80,276
Deferred income taxes	12,293	12,293
Provision for future obligations	—	13,933
Common shareholders' equity	112,739	148,939
	<b>\$174,547</b>	<b>\$264,956</b>

### Capital expenditures

Echo Bay's capital expenditures during 1984 were \$8.2 million, a reduction from the \$10.8 million spent in 1983 and \$26.8 million spent in 1982. The reduced level of spending reflects the lower capital requirements of the Lupin mine now that it is in full production.

Capital expenditures in 1985 are anticipated to be about \$13.6 million, of which \$2.5 million will be related to Round Mountain. Included in the budget is \$4.9 million to be spent on the deepening of the Lupin shaft.





**Quarter-end capitalization**

*Millions of Canadian dollars*

- Long-term debt
- Deferred charges
- Redeemable preferred shares
- Common shares
- Retained earnings



**1984 Distribution of revenue**

- 43% Cost of gold sales
- 9% General and administrative
- 2% Exploration
- 1% Interest

*Non Cash costs*

- 14% Depreciation and amortization
- 4% Income taxes
- 27% Net earnings

## Financings

Over the past three years, Echo Bay has financed capital requirements through common share offerings, and cash flow from operations.

In April 1984, Echo Bay issued four million common shares through a public offering in Canada and the United States at C\$10.88 and U.S. \$8.63 per share. The proceeds of the issue were used to redeem the Company's \$40 million of 12 percent redeemable preferred shares in May at their stated value of \$25.00 plus accrued dividends of \$1.172 per share. Redemption of the preferred issue has eliminated the \$4.8 million after-tax preferred dividend, and increases the net earnings applicable to the common shareholder.

Echo Bay spent about \$6.6 million on exploration during 1984, of which \$5 million was funded by the sale of 2,860 flow-through units to Canadian investors in April 1984. The purchasers of these units earned the right to use tax benefits associated with Echo Bay's Canadian exploration program which the Company cannot currently use. Unit holders earned the right to 286,000 common shares which were issued in November.

Purchasers of flow-through units can use the cost of the units purchased to reduce Canadian income taxes. Because of the tax advantage to Canadian investors, flow-through units normally sell at a significant premium over the market value of the Company's common shares. Echo Bay's 1984 flow-through units were sold at \$17.50 per share, a 60 percent premium over the \$10.88 market price for the common shares on the day the issue took place. Flow-through shares are popular with Canadian mining companies which, like Echo Bay, are not in a current tax-paying position because of large capital cost allowances and other factors. It is an effective way to encourage exploration for Canadian mineral resources.

Echo Bay is financing part of its 1985 Canadian exploration program through further placements of flow-through shares.

On February 4, 1985, Echo Bay issued a further 3.6 million common shares through an offering in the United States and Canada at US\$8.125 and C\$10.75 per share. The net proceeds of approximately C\$35.7 million were used to repay an interim loan for part of the purchase price of Copper Range.

To fund the portion of the Copper Range acquisition not covered by the equity issue, Echo Bay borrowed 100,000 troy ounces of gold from a Canadian chartered bank in January 1985. The gold was delivered against previously contracted forward sales at an average price of US\$307 per troy ounce, realizing US\$30.7 million.

The gold loan is non-revolving with a five-year term and is repayable in 60 equal monthly installments. The interest rate, which varies with the bank's cost and the pricing option selected by Echo Bay, is currently 1.6 percent per year. There is also an option to convert the gold loan to a U.S. dollar loan at an interest rate based on prime or Eurodollar rates.

Computer data is transmitted from the mine to head office in Edmonton via satellite.

As the loan is the equivalent of a forward sale of the Company's future gold production, it will be shown on the balance sheet as deferred revenue, similar to the gold purchase warrants issued in 1981. The gold loan will affect future earnings as revenue will be credited at US\$307 per ounce when repayments start in April 1985.

An increase in gold prices during the term of the loan would result in an opportunity cost on 100,000 troy ounces of gold sold at US\$307. This would be countered by any increase in value of the substantial gold reserves and mineral inventory acquired.

The Company believes internally generated funds and existing credit facilities will be sufficient to meet currently anticipated capital expenditures.

### Gold forward sales

The Company believes that investors buy Echo Bay shares because of the Company's ability to produce gold efficiently and to increase gold production through acquisitions and through the development of gold properties. Investors do not buy because of the Company's ability to predict gold prices. Echo Bay, therefore, only sells forward to protect known cash commitments and to finance acquisitions. The objective is to give the investor the maximum play on the gold price while still ensuring continued operations.

In 1983, when the year started with \$32.0 million of debt, 34 percent of total gold production was hedged at an average price of US\$417 per troy ounce. In 1984, which started with debt of \$11.6 million, 17 percent of gold production was sold forward at an average price of US\$461 per troy ounce.

Based on present known commitments, the Company anticipates that 1985 hedging should approximate one-third of gold production. As of February 19, 1985, 54,800 troy ounces of 1985 production had been sold forward at an average price of US\$355 per troy ounce, and 4,800 troy ounces of 1986 at US\$330. There will also be repayments under the gold loan of 13,300 and 20,000 troy ounces for 1985 and 1986 respectively, equivalent to forward sales at US\$307.





**Consolidated  
balance sheet**(stated in thousands  
of Canadian dollars)  
December 31**Assets**

## Current assets:

	1984	1983
Marketable securities, at cost which approximates market value	\$ 172	\$ -
Accounts receivable	848	754
Inventories (note 2)	13,027	13,354
Prepaid expenses	832	569
Deferred income taxes	236	548
Total current assets	15,115	15,225
Property, plant and equipment (note 3)	115,652	115,149
Deferred expenditures (note 4)	53,594	30,008
	<b>\$184,361</b>	<b>\$160,382</b>

**Liabilities and shareholders' equity**

## Current liabilities:

Accounts payable	\$ 7,301	\$ 6,072
Accrued liabilities	2,513	2,104
Current portion of long-term debt (note 5)	-	4,318
Total current liabilities	9,814	12,494

## Other liabilities:

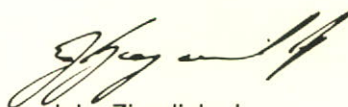
Long-term debt (note 5)	9,515	7,285
Deferred revenue (note 6)	40,000	40,000
Deferred income taxes (note 10)	12,293	9,784
Total other liabilities	61,808	57,069
Redeemable preferred shares (note 7)	-	40,000

## Common shareholders' equity:

Common shares (note 8)		
unlimited number authorized; issued and outstanding— 35,711,000 shares (1983—31,425,000 shares)	71,402	24,507
Retained earnings	41,337	26,312
Total common shareholders' equity	112,739	50,819

Commitments and contingencies  
(note 12 and 13)**\$184,361** **\$160,382**See accompanying Summary of significant accounting  
policies and Notes to consolidated financial statements.

On behalf of the Board:

Robert F. Calman,  
DirectorJohn Zigarlick, Jr.,  
Director

**Consolidated  
statement of earnings**

(stated in thousands of Canadian  
dollars, except for per share data)  
Year ended December 31

**Revenue:**

Gold operations  
Silver operations  
Interest and other income  
Gain on sale of aircraft (note 9)

**Costs and expenses:**

Cost of sales—gold  
Cost of sales—silver  
Depreciation and amortization  
Exploration  
General and administrative  
Interest on long-term debt

Earnings (loss) before income taxes  
Deferred income tax expense (recovery)  
(note 10)

Net earnings (loss)  
Dividends on redeemable preferred shares  
Net earnings (loss) applicable to common  
shares

Earnings (loss) per share (note 11)

1984 1983 1982

**\$87,144** \$62,533 \$11,808  
— — 336  
**989** 214 700  
**1,127** — —  
**89,260** 62,747 12,844

**38,454** 34,000 5,659  
— — 1,853  
**13,014** 11,031 3,076  
**1,661** 73 —  
**7,769** 5,483 1,504  
**784** 2,253 928  
**61,682** 52,840 13,020

**27,578** 9,907 (176)  
**3,698** 934 (129)

**\$23,880** \$ 8,973 \$ (47)  
**1,875** 4,800 4,800  
**\$22,005** \$ 4,173 \$ (4,847)

**\$0.64** \$0.14 \$(0.18)

**Consolidated  
statement of retained  
earnings**

(stated in thousands of  
Canadian dollars)  
Year ended December 31

Balance, beginning of year  
Net earnings (loss)

Dividends on redeemable preferred shares  
Dividends on common shares  
(1984—\$0.11 per share;  
1983—\$0.10 per share)

Common share issue costs  
(less income tax recovery of  
1984—\$1,081; 1983—\$567)

Flow-through unit issue costs  
(less income tax recovery of \$172)

Balance, end of year

**\$26,312** \$26,859 \$31,706  
**23,880** 8,973 (47)  
**50,192** 35,832 31,659  
**1,875** 4,800 4,800

**3,914** 2,881 —

**2,646** 1,839 —

**420** — —  
**8,855** 9,520 4,800

**\$41,337** \$26,312 \$26,859

See accompanying Summary of significant accounting  
policies and Notes to consolidated financial statements.



**Consolidated statement of changes in financial position**  
(stated in thousands of Canadian dollars)  
Year ended December 31

<b>Source of funds</b>	<b>1984</b>	<b>1983</b>	<b>1982</b>
Operations:			
Net earnings (loss)	\$ 23,880	\$ 8,973	\$ (47)
Add (deduct) items not requiring current funds:			
Depreciation and amortization	13,014	11,031	3,076
Deferred income tax expense (recovery)	3,698	934	(129)
Gain on sale of assets	(1,100)	(16)	(8)
Provided from operations	39,492	20,922	2,892
Proceeds from common share issue	43,785	24,500	-
Proceeds from long-term debt	15,000	-	31,952
Proceeds from issue of flow-through common shares	3,110	-	-
Proceeds from sale of royalty interest	-	-	1,382
Proceeds from sale of assets	10,276	468	24
Income tax refund	307	-	-
Total funds provided	111,970	45,890	36,250

**Use of funds**

Redemption of redeemable preferred shares	40,000	-	-
Purchase of property, plant and equipment	18,631	10,805	7,070
Deferred expenditures	6,752	2,270	25,126
Inco royalty purchase	15,004	-	-
IUIH royalty purchase	5,891	-	-
Reclassification of current portion of long-term debt	-	4,318	4,050
Repayment of long-term debt	12,770	16,299	-
Common share issue costs	3,727	2,406	-
Flow-through unit issue costs	592	-	-
Common dividends	3,914	2,881	-
Redeemable preferred dividends	1,875	4,800	4,800
Reclassification of deferred income taxes	244	50	30
Total funds applied	109,400	43,829	41,076
Increase (decrease) in working capital	2,570	2,061	(4,826)
Working capital, beginning of year	2,731	670	5,496
Working capital, end of year	\$ 5,301	\$ 2,731	\$ 670

**Changes in working capital**

Cash and short-term deposits	\$ -	\$ (944)	\$ (1,826)
Marketable securities	172	-	-
Accounts receivable	94	164	(3,712)
Inventories	(327)	2,432	6,929
Income taxes recoverable	-	-	(4,497)
Prepaid expenses	263	257	28
Deferred income taxes	(312)	(50)	(30)
Accounts payable	(1,229)	(646)	3,179
Accrued liabilities	(409)	1,116	(847)
Current portion of long-term debt	4,318	(268)	(4,050)
Increase (decrease) in working capital	\$ 2,570	\$ 2,061	\$ (4,826)

See accompanying Summary of significant accounting policies and Notes to consolidated financial statements.

## Summary of significant accounting policies

December 31, 1984

### General

Echo Bay Mines Ltd. is a publicly-owned Company traded on the Toronto, Montreal, Alberta and American Stock Exchanges.

The Company is engaged in the mining and processing of gold at its Lupin property, located in the Northwest Territories, Canada. From 1964 to March 1982, the Company engaged in silver mining at Port Radium in the Northwest Territories. Silver operations ceased in the first quarter of 1982; final disposition of inventories and assets occurred through the balance of that year.

IU International Corporation ("IU") acquired ownership of the Company in several transactions, attaining majority ownership in 1967. The Company was a wholly-owned subsidiary of IU from 1970-1981. These acquisitions were accounted for as purchases, and accordingly, the purchase accounting adjustments were included in the consolidated financial statements of IU. If such purchase adjustments had been recorded by the Company, there would be no significant impact on reported financial position or results of operations included herein.

The financial statements, which are prepared on the historical cost basis, are prepared in accordance with accounting principles generally accepted in Canada and conform in all material respects with International Accounting Standards and those generally accepted in the United States.

### Principles of consolidation

The consolidated financial statements include the accounts of the Company's wholly-owned subsidiary, Echo Bay Inc., from the date of incorporation, July 2, 1984.

### Inventories:

Inventories of gold, which include bullion and concentrates in process, are valued at the lower of cost, using the 'first-in, first-out' method, and net realizable value.

Materials and supplies are valued at the lower of average cost and net realizable value.

### Property, plant and equipment

Property, plant and equipment are recorded at cost. Depreciation is provided using the straight-line method based on an estimated economic life to a maximum of 15 years for tangible fixed assets.

Upon sale or retirement, the cost of the property, plant and equipment and related depreciation are removed from the accounts and any gains or losses are taken into income as they occur.

Repairs and maintenance expenditures are charged to operations; major betterments and replacements are capitalized.

### Deferred expenditures

Deferred mine expenditures include acquisition, development, interest and certain construction costs of the Lupin mine. These expenditures are charged to operations over the estimated life of the mine by the unit-of-production method, based on proven and probable ore reserves.

Exploration and development costs for specific major projects are deferred. Interest costs on major construction or development projects are also deferred. When a project is determined not to be commercially feasible, the deferred costs are charged to operations. General exploration costs and related administrative expenses are charged to operations as incurred.

Royalty interests purchased, and interest incurred on funds borrowed to effect the purchase, are deferred until the threshold production levels at which the royalty amounts would have become payable are reached (note 4). The balance is then charged to operations using the unit-of-production method, based on proven and probable ore reserves.



### Commercial production

Commercial production at the Lupin mine was established as of October 1, 1982, the date on which construction of the mine and mill was substantially complete and production could be sustained near design capacity.

Prior to commercial production being established, all revenue and costs relating to the Lupin mine were deferred.

Depreciation and amortization of the Lupin mine assets commenced at the start of commercial production. As a result there was no depreciation or amortization included in the cost of gold inventories existing at the start of commercial production.

### Investment tax credits

Investment tax credits are credited to income as a reduction of income tax expense, on the flow-through basis.

### Ore reserves

The Lupin mine ore reserves as at December 31, 1984, to a depth of 1,312 feet below surface, have been estimated under the supervision of independent geologists to be:

	Tonnage (short tons)	Average grade of gold (troy oz./ton)	Gold content (troy oz.)
Proven	2,317,200	0.361	835,300
Probable	1,145,500	0.346	395,800
Total	3,462,700	0.356	1,231,100

In arriving at rates for amortization under the unit-of-production method, the proven and probable reserves as indicated above are used. Such ore reserve estimates are revised as data becomes available to warrant revision.

### Comparative figures

Certain of the comparative figures have been reclassified to conform with the current year's presentation.

## Notes to consolidated financial statements

(stated in Canadian dollars)  
December 31, 1984

### 1. Accounting policy change

The Company adopted as of January 1, 1983, the straight-line method of depreciation for tangible fixed assets based on estimated economic life to a maximum of 15 years. This change, from the unit-of-production method, results in a more appropriate matching of the economic and physical lives of the equipment, and is the predominant method of depreciation used in the precious metals industry for such assets. As a result of the change, the Company's net earnings for the year ended December 31, 1983 increased \$1,120,000 or \$0.04 per share. The effect of the change on the 1982 results was not material, and as result, there has not been a restatement of historical results.

### 2. Inventories

(thousands of Canadian dollars)

	1984	1983
Gold bullion	\$ 490	\$ 917
Gold concentrate in process	2,799	2,332
Materials and supplies	9,738	10,105
	<b>\$ 13,027</b>	<b>\$ 13,354</b>

### 3. Property, plant and equipment

	1984		1983	
(thousands of Canadian dollars)	Cost	Accumulated depreciation	Net	Net
Land improvements	\$ 7,269	\$ 948	\$ 6,321	\$ 5,742
Buildings	47,091	7,642	39,449	41,128
Equipment	78,634	14,495	64,139	65,709
Aircraft	1,962	485	1,477	222
	<b>134,956</b>	<b>23,570</b>	<b>111,386</b>	<b>112,801</b>
Projects in progress	4,266	—	4,266	2,348
	<b>\$ 139,222</b>	<b>\$ 23,570</b>	<b>\$ 115,652</b>	<b>\$ 115,149</b>

In 1983, \$19,705,000 of assets were reclassified from deferred expenditures to property, plant and equipment. The 1983 net cost of property, plant and equipment includes accumulated depreciation of \$14,835,000.

### 4. Deferred expenditures

	1984		1983	
(thousands of Canadian dollars)	Cost	Accumulated amortization	Net	Net
Deferred mine expenditures	\$ 31,350	\$ 6,583	\$ 24,767	\$ 26,388
Royalty purchases	21,522	—	21,522	—
Exploration	4,122	—	4,122	1,035
Warrant issue costs	3,102	1,927	1,175	1,668
Other	2,020	12	2,008	917
	<b>\$ 62,116</b>	<b>\$ 8,522</b>	<b>\$ 53,594</b>	<b>\$ 30,008</b>

The 1983 deferred expenditures include \$4,498,000 of accumulated amortization. In 1984, \$627,000 of capitalized interest was included in royalty purchases (1983—nil).

On August 30, 1984 and November 2, 1984, respectively, the Company purchased the commitments that existed in royalty interests held by an Inco Limited subsidiary (95%) and Dome Mines Limited (5%) for \$15 million; and by IU International Holdings Limited (IUIH) for U.S. \$4.2 million and an exchange of corporate aircraft, which added approximately U.S. \$187,000 to the purchase cost. Pursuant to the terms of the Inco royalty, 5% of gold revenue would have been payable for gross production after 660,000 troy ounces, decreasing to 2½% after 1.8 million troy ounces of production. For the IUIH royalty, \$20.00 per troy ounce would have been payable for gross production after 850,000 troy ounces, until the cost of a \$2.5 million exploration program funded by IUIH together with a return of 18% per annum was attained, with a further \$10.00 per troy ounce, adjusted for inflation, payable thereafter. Under present Lupin mining and production plans, the thresholds will be reached in 1986 and 1987 for the Inco and IUIH royalties, respectively.



**5. Long-term debt**

(thousands of Canadian dollars)

The loan with a Canadian bank for financing of the Lupin mine bears interest at rates varying from prime to prime plus ½ of 1% and was repayable in equal quarterly installments of \$561,000 commencing April 1, 1983

	1984	1983
	\$ -	\$ 8,967

In 1983, a credit facility of \$7,252,000 with a Canadian bank assisted in financing the purchase of goods and the payment of transportation costs required for the winter road to Lupin. This loan was repayable in 12 equal monthly installments commencing April 30, 1983

-	2,636
---	-------

Credit facilities of \$10,000,000 with a Canadian bank. The loans bears interest at the prime rate and has a maturity date of January 31, 1986 with no fixed repayment terms

515	-
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The loan with a Canadian bank for financing the purchase of the royalty interest held by an Inco Limited subsidiary (95%) and Dome Mines Limited (5%) and IU International Holdings Limited bears interest at the prime rate and has a maturity date of September 1, 1986 with no fixed repayment terms

9,000	-
-------	---

9,515	11,603
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-	4,318
---	-------

Less: current portion of long-term debt

\$ 9,515	\$ 7,285
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Each of the facilities has various drawing options, including bankers' acceptances, Canadian dollar loans and foreign currency loans. The loans that were repaid in 1984 were secured by assignments of gold inventories, and fixed and floating charges on all Lupin assets.

**6. Deferred revenue**

There were 6,400,000 Gold Purchase Warrants issued on February 5, 1981. 1,600,000 are exercisable on each of January 31, 1986, 1987, 1988 and 1989. Each Warrant will entitle the holder to purchase, from the Company, 0.01765 of a troy ounce of gold for U.S. \$10.50 (of which U.S. \$5.25 was prepaid at the time of issue of the Warrant) plus a 1% delivery fee.

If a Warrant is not exercised on its exercise date, the holder may tender the Warrant for cancellation at any time during the two years after the exercise date in return for (i) the market value at the exercise date of the gold purchasable under the Warrant, less the unpaid purchase price, the 1% delivery fee and a U.S. \$0.25 service fee, if the market value of gold was equal to or greater than U.S. \$625.00 per troy ounce on the exercise date; or (ii) U.S. \$5.25, if the market value of gold was less than U.S. \$625.00 per troy ounce on the exercise date.

In the event that production of gold is suspended, the exercise dates of the Gold Purchase Warrants will be extended. Notwithstanding such extension, a Gold Purchase Warrant may be tendered for cancellation in return for U.S. \$5.25 on or after its original exercise date. No Gold Purchase Warrant will be exercisable unless production has been resumed on or before December 31, 1992.

Under certain circumstances related to the Company's gold reserves, the holders of Warrants have the right to accelerate the exercise of Warrants.

As long as any of the Gold Purchase Warrants are outstanding, there are certain restrictions on the Company's borrowing powers.

## 7. Redeemable preferred shares

Redeemable, cumulative, voting Preferred Shares—unlimited number authorized and issuable in series; issued—none.

On May 22, 1984 the Company redeemed all of the 1,600,000 outstanding \$3.00 Redeemable Preferred Shares at their stated value of \$25.00 per share plus accrued dividends thereon of \$1.172 per share, with the net proceeds of 4,000,000 newly-issued Common Shares (note 8).

## 8. Common shares

Common Shares of no par value—unlimited number authorized; issued and outstanding—35,711,000.

On April 18, 1984, the Company sold 4,000,000 newly issued Common Shares of the Company for gross proceeds of \$43,785,000. The net proceeds were used to redeem the \$3.00 Redeemable Preferred Shares (note 7) and to reduce indebtedness.

On November 22, 1984, the Company issued 286,000 Common Shares pursuant to the rights of unitholders of flow-through securities issued on April 18, 1984. The \$5,005,000 of proceeds from the issue of 2,860 flow-through units were used to fund the 1984 Canadian mineral exploration program of the Company. One hundred Common Shares per flow-through unit were earned, based on exploration expenditures made by the Company.

An Employee Share Incentive Plan provides for the granting of options to purchase Common Shares, to officers and key employees of the Company. Options are exercisable in varying amounts over periods from one to ten years after the date of the grant. At December 31, 1984, options for 423,900 (1983—36,000) Common Shares were outstanding at an average price of \$11.31 (1983—\$8.75) per share and 76,100 shares were reserved for future grants.

On November 10, 1983, the holders of Common Shares of IU International Corporation ("IU") approved the distribution of the Common Shares of the Company held by IU to IU's common shareholders on a one-for-one basis. The distribution increased the number of holders of Common Shares from 885 to 31,914.

## 9. Gain on sale of aircraft

On December 27, 1984, the Company sold a Hercules aircraft for proceeds of \$8,582,000. To effect the sale, the Company exercised its option to purchase the aircraft for \$7,100,000 under the terms of a lease held by a Canadian chartered bank. Net holding costs of \$355,000 incurred in the year related to the aircraft have been offset against the gain on the sale.

## 10. Income taxes

Deferred income tax expense (recovery) results from timing differences in the recognition of revenue, expense and other allowances for tax and financial statement (book) purposes. The sources of these differences and the tax effect of each are as follows:

(thousands of Canadian dollars)	1984	1983	1982
Excess of tax over book (book over tax)			
depreciation and amortization	\$2,132	\$ 317	\$ (129)
Excess of book over tax for aircraft			
reserve allowances	313	50	—
	<u>2,445</u>	<u>367</u>	<u>(129)</u>
Financing costs	1,253	567	—
	<u>\$3,698</u>	<u>\$ 934</u>	<u>\$ (129)</u>



The effective tax rates varied from the Canadian income tax rate for the following reasons:

	1984	1983	1982
Federal and provincial income tax rate	46.2%	47.1%	(47.9%)
Resource allowance and earned depletion	(23.4)	(28.3)	-
Investment tax credits	(9.0)	(8.3)	-
Inventory allowance	(0.3)	(1.1)	(26.4)
Other items	-	-	1.0
	13.5%	9.4%	(73.3%)

The Company is entitled to investment tax credits totalling \$4,292,000 which have not been recognized in the accounts, of which \$1,853,000, \$1,404,000, \$761,000 and \$274,000 will expire if not utilized before 1987, 1988, 1991 and 1992, respectively.

### 11. Earnings (loss) per share

The earnings (loss) per share has been calculated based on the weighted average Common Shares outstanding during the years. Preferred dividend requirements have been deducted from the net earnings (loss) to arrive at the earnings (loss) attributable to common shareholders. Further, retroactive effect has been given to the two-for-one split which occurred on February 23, 1983; and the six-for-five split which was declared on August 9, 1983 to shareholders of record on August 24, 1983.

### 12. Commitments

The Company's principal lease commitments are for the Boeing 727 aircraft, rental of hangar facilities at Edmonton, land related to the Yellowknife hangar and the rental of head office premises in Edmonton. The Company has other leases for certain equipment. All of these leases are operating leases, and most of the leases contain renewal options for varying periods. The Company's commitments under the remaining terms of these leases is approximately \$8,806,000 payable as follows:

1985	\$1,068,000
1986	1,204,000
1987	1,190,000
1988	1,122,000
1989	1,034,000
Thereafter	3,188,000

The Company has a series of future contracts for the sale of gold. These contracts (28,100 troy ounces at an average price of U.S. \$397 per troy ounce) come due in various months until December, 1985. The company also has a series of forward exchange contracts (aggregate amount of U.S. \$17,800,000) for the exchange of U.S. dollars for Canadian dollars. These contracts, translated at the exchange rate at December 31, 1984 are the equivalent of Canadian \$23,521,000 as compared to Canadian \$23,492,000 translated at the contract rates.

The Company has obtained from a Canadian chartered bank a commitment to issue Letters of Guarantee up to a maximum of \$1,000,000 to the Canadian Federal Government, for federal environmental requirements regarding eventual land reclamation at the Lupin mine site.

The Company has entered into a consulting agreement with IU International Management Corporation, a subsidiary of IU International Corporation, pursuant to which the IU subsidiary will furnish executive, administrative, financial, accounting, legal, corporate tax and certain other services for an annual fee of \$750,000 plus out-of-pocket expenses. The consulting agreement is terminable on November 21, 1985 by either party upon six months written notice being given, or on November 21 in any year thereafter upon 12 months notice being given.

### 13. Contingencies

The Company is currently involved in a number of insurance and legal claims, the outcome of which cannot presently be determined with certainty.

### 14. Segmented information

The Company's industry is gold mining which is carried out in the Northwest Territories. In 1984, 84% of total gold sales were made to customers in the United States (1983-86%) with the balance of sales to Canadian customers.

### 15. Subsequent events

Pursuant to an underwriting agreement dated January 24, 1985 entered into between the Company and Burns Fry Limited and Wood Gundy Inc., and an underwriting agreement dated January 24, 1985 and to be entered into between the Company and a number of United States underwriters managed by Salomon Brothers Inc, Goldman, Sachs & Co., Burns Fry and Timmins Inc. and Wood Gundy Corp., the Company proposes to sell an aggregate of 3,600,000 Common Shares of the Company for a total consideration of \$38,719,950. The net proceeds of the issue will be \$35,676,403 after deducting expenses of the issue estimated at \$993,075. These proceeds will be applied to reduce bank indebtedness incurred to finance the acquisition of Copper Range Company.

On January 11, 1985, the Company acquired from The Louisiana Land and Exploration Company ("LL&E") of New Orleans all of the issued shares of Copper Range Company ("Copper Range"). Copper Range owns a 50% undivided interest in the Round Mountain gold mining project located in Nye County, Nevada, other exploration prospects in the United States, and the inactive White Pine copper mining complex in the upper peninsula of Michigan. The acquisition will be accounted for by the purchase method, with the results of operations being included in the Company's results from January 1, 1985.

Assets acquired and values assigned thereto are as follows:

(stated in thousands of U.S. \$)	White Pine	Round Mountain	Other
Net working capital	\$ 5,600	\$ 3,400	\$ -
Copper assets held for sale <sup>1</sup>	23,000	-	-
50% of Round Mountain property, plant and equipment <sup>1</sup>	-	10,000	-
Resource properties <sup>1</sup>	-	3,000	3,000
Round Mountain ore reserves <sup>2</sup>	-	18,000	-
	\$28,600	\$34,400	\$ 3,000

<sup>1</sup> at estimated net realizable value.

<sup>2</sup> represents the difference between the purchase price of Copper Range and the costs allocated to identifiable assets.

The assigned fair value of the assets acquired are estimates, and may be adjusted based on further study.

The purchase price was U.S. \$55 million cash and assumption of certain reclamation and holding costs. The discounted value of these reclamation and holding costs as of the acquisition date is approximately U.S. \$11.0 million. Included in these costs is a lease obligation for a refinery, presently available to the copper mining project, with a three year lease term commencing January 1, 1985 and terminating January 4, 1988, at an annual rental of U.S. \$2.0 million. The Company has the exclusive irrevocable option to purchase the refinery as of January 1, 1988 for the sum of U.S. \$13.5 million. Prior to the acquisition, Copper Range granted to LL&E a 3% gross royalty interest commencing January 1, 1989 based on revenues generated from Copper Range's interest in production from the Nevada precious metal properties, with the royalty percentage reducing to 1½% after an aggregate of U.S. \$75 million has been paid by Copper Range.



If the acquisition and related financing had been consummated on January 1, 1983, the pro-forma consolidated revenue and net income from continuing operations of the Company would have been \$118 million and \$27 million for the year ended December 31, 1984, and \$90 million and \$14 million for the year ended December 31, 1983. The pro-forma earnings per share from continuing operations would have been \$0.67 in 1984 and \$0.28 in 1983. The Company expects some ongoing costs related to the discontinued operations of the White Pine copper mining project.

On January 10, 1985, Echo Bay Inc., a wholly-owned subsidiary of the Company, arranged a term credit facility with a Canadian chartered bank for up to U.S. \$60.0 million as interim financing for the acquisition of Copper Range. This credit is non-revolving, bears interest at U.S. prime, is repayable in full by June 15, 1985 and is secured by the shares of the subsidiary and guaranteed by the Company. On January 11, 1985, U.S. \$55.5 million of this facility was utilized and U.S. \$30.0 million was repaid the same day from the proceeds of a gold loan. This credit facility includes certain covenants including restrictions on other indebtedness and guarantees and pledges.

On January 10, 1985, a subsidiary of the Company borrowed 100,000 ounces of gold from a Canadian chartered bank. This gold was delivered against previously contracted forward sales and realized U.S. \$30.6 million, of which U.S. \$30.0 million was utilized on January 11, 1985 to partially repay the interim financing for the Copper Range acquisition. This gold loan is non-revolving, is repayable in 60 equal monthly instalments and is secured by the shares of Copper Range and guaranteed by the Company. The interest rate on the loan varies with the bank's cost of funds and with the pricing option selected by the Company, and at present is approximately 1.6%. This term credit includes certain covenants including restrictions on other indebtedness and guarantees and pledges. There is an option to convert the gold loan to borrowings in U.S. dollars at an interest rate of New York prime or LIBOR prime plus 1/2%.

## Auditors' report

To the Shareholders  
Echo Bay Mines Ltd.

We have examined the consolidated balance sheet of Echo Bay Mines Ltd. and subsidiary as at December 31, 1984 and 1983 and the consolidated statements of earnings, retained earnings and changes in financial position for each of the years in the three-year period ended December 31, 1984. Our examinations were made in accordance with generally-accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of Echo Bay Mines Ltd. and subsidiary as at December 31, 1984 and 1983 and the results of their operations and the changes in their financial position for each of the years in the three-year period ended December 31, 1984 in accordance with generally-accepted accounting principles which, except for the change, with which we concur, made as of January 1, 1983, in the method of depreciating tangible fixed assets as explained in note 1 to the financial statements, have been applied on a consistent basis.

*Peat, Marwick, Mitchell & Co.*

Peat, Marwick, Mitchell & Co.  
Chartered Accountants

Edmonton, Canada  
January 24, 1985

**Selected financial data**

(thousands of Canadian dollars,  
except per share data)  
Year ended December 31,

<b>Earnings statement data</b>	<b>1984</b>	<b>1983</b>	<b>1982</b>	<b>1981</b>	<b>1980</b>
Revenue:					
Gold operations	\$ 87,144	\$ 62,533	\$ 11,808	\$ –	\$ –
Silver operations <sup>1</sup>	–	–	336	9,283	58,575
Interest and other income	2,116	214	700	8,226	2,234
Net earnings (loss)	23,880	8,973	(47)	926	29,176
Preferred dividend requirements	1,875	4,800	4,800	4,320	–
Net earnings (loss) applicable to Common Shares	22,005	4,173	(4,847)	(3,394)	29,176
Weighted average Common Shares outstanding, in thousands <sup>2</sup>	34,276	30,240	27,225	27,225	27,225
Earnings (loss) per Common Share <sup>2</sup>	0.64	0.14	(0.18)	(0.12)	1.07

**Balance sheet data**

Working capital	\$ 5,301	\$ 2,731	\$ 670	\$ 5,496	\$ 7,312
Total assets	184,361	160,382	157,938	133,408	53,960
Long-term debt	9,515	7,285	27,902	–	–
Deferred revenue	40,000	40,000	40,000	40,000	–
\$3.00 Preferred Shares (redeemed May 22, 1984)	–	40,000	40,000	40,000	–
Common shareholders' equity	112,739	50,819	26,866	31,713	36,692

**Other data**

Cash dividends:					
Common Shares	\$ 3,914	\$ 2,881	\$ –	\$ –	\$ –
\$3.00 Preferred Shares	1,875	4,800	4,800	4,320	–
Funds from operations	39,492	20,922	2,892	7,760	34,817
Capital and deferred expenditures	25,383	13,075	32,196	86,703	29,215

<sup>1</sup>Included in 'Revenue–Silver operations' are gains on settlement of forward contracts to sell silver in amounts of: 1982–\$ Nil; 1981–\$381,000; 1980–\$29,400,000.

<sup>2</sup>Adjusted to reflect the 125 for one split of Common Shares on November 10, 1980, the two for one split of Common Shares on February 23, 1983 and the six for five split of Common Shares on August 24, 1983.

**Quarterly financial highlights**

(thousands of Canadian dollars,  
except per share & dividend data)  
(Unaudited)

	Revenue	Cost of sales	Net earnings	Earnings per common share	Common dividends	Preferred dividends
<b>1984</b>						
1st quarter	\$20,427	\$ 9,462	\$ 5,111	\$ 0.12	\$ –	\$ –
2nd quarter	21,454	8,690	6,263	0.16	0.05	1.17
3rd quarter	22,815	10,041	5,749	0.16	–	–
4th quarter	24,564	10,261	6,757	0.19	0.06	–
Total	\$89,260	\$38,454	\$23,880	\$ 0.64	\$ 0.11	\$ 1.17
<b>1983</b>						
1st quarter	\$15,230	\$ 8,402	\$ 1,368	\$ 0.01	\$ –	\$ –
2nd quarter	15,800	8,505	2,137	0.02	0.05	1.50
3rd quarter	15,814	8,808	1,693	0.02	–	–
4th quarter <sup>1</sup>	15,903	8,285	3,775	0.09	0.05	1.50
Total	\$62,747	\$34,000	\$ 8,973	\$ 0.14	\$ 0.10	\$ 3.00

<sup>1</sup>The Company retroactively adopted, as of January 1, 1983, the straight-line method of depreciation for fixed tangible assets, based on estimated economic life up to a maximum of 15 years. This change resulted in a \$1.1 million increase in net earnings, or \$0.04 per common share, and is reflected in fourth quarter 1983 results.



## Shareholder information

### Shareholders

Echo Bay is the most widely-held North American gold mining company, with more than 31,000 registered shareholders at year-end. Approximately 83 percent are resident in the United States (holding 60 percent of the shares), 16 percent in Canada (holding 39 percent) and the balance in Europe and elsewhere.

### Common shares

The common shares were first listed in Canada on the Toronto, Montreal and Alberta stock exchanges in April 1983. Listing on the American Stock Exchange occurred in October 1983 and the Company anticipates that trading on the Paris Bourse will commence in April 1985. Outstanding common shares at year-end totalled 35,711,000. A further 3,600,000 shares were issued in February 1985.

The following table sets out the high and low closing prices on the Company's principal markets since trading began in 1983. Prices have been adjusted for a six-for-five share split in 1983.

	American Stock Exchange		Toronto Stock Exchange	
	High	Low	High	Low
<b>1984</b>				
4th Quarter	US\$11.13	US\$8.50	C\$14.63	C\$10.88
3rd Quarter	10.38	6.50	13.63	8.75
2nd Quarter	9.63	8.13	12.50	10.25
1st Quarter	9.63	6.25	12.00	7.88
<b>1983</b>				
4th Quarter	US\$9.25	US\$6.13	C\$11.50	C\$7.63
3rd Quarter	From October 11, 1983		14.88	9.50
2nd Quarter			13.50	8.75
			From April 28, 1983	

### Dividends

The dividend policy of Echo Bay is reviewed periodically by the board of directors and currently provides for a common share dividend of C\$0.12 per year, C\$0.06 payable on June 30 and December 31. Dividends payable to United States residents are converted and paid in U.S. dollars. Non-residents of Canada are subject to a dividend withholding tax, currently 15% for United States residents.

### Preferred shares and gold purchase warrants

The preferred shares were redeemed in May 1984 at \$25.00 per share, plus a prorated dividend of \$1.172. The four series of gold purchase warrants, exercisable in January 1986, 1987, 1988 and 1989, are listed only in Canada on the Toronto, Montreal and Alberta stock exchanges.

### Transfer agents and registrars

The Company's transfer agents and registrars are Canada Trust Company in Canada, Morgan Guaranty Trust Company of New York in the United States and Orion Royal Bank Limited in the United Kingdom.

### General meeting

The annual general meeting of shareholders is scheduled to be held on Wednesday, June 12, 1985 at 10:00 a.m. in Commerce Hall, Commerce Court West, Toronto, Ontario.

### Form 10-K

A copy of the annual report on Form 10-K to the United States Securities and Exchange Commission is available on request to the Investor Relations Department of Echo Bay.

**Directors**

John M. Seabrook

John Zigarlick, Jr.

Latham C. Burns



John Gilray Christy

Robert W. Wolcott, Jr.

Peter L. P. Macdonnell



J. Allan Boyle

John N. Abell



Robert F. Calman

W. Donald Bean

Egerton W. King



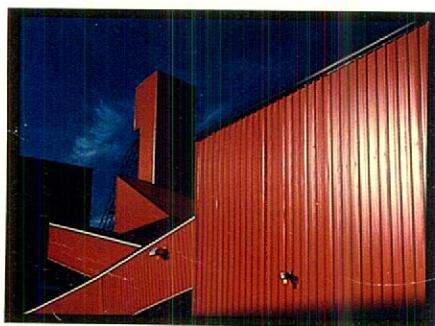
## Directors

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|--|---|--|
| <p><sup>1,2</sup> John N. Abell, 53<br/><i>London, England</i><br/><i>Chairman and Chief</i><br/><i>Executive Officer</i><br/><i>Orion Royal Bank</i><br/><i>Limited</i><br/><i>(merchant bankers)</i></p> <p><sup>2,3</sup> W. Donald Bean, 45<br/><i>Toronto, Ontario</i><br/><i>President</i><br/><i>Wood Gundy Inc.</i><br/><i>(investment dealers)</i></p> <p><sup>1,3,4</sup> J. Allan Boyle, 68<br/><i>Toronto, Ontario</i><br/><i>Director and Past</i><br/><i>President</i><br/><i>The Toronto-Dominion</i><br/><i>Bank</i><br/><i>(bankers)</i></p> <p><sup>1,3</sup> Latham C. Burns, 54<br/><i>Toronto, Ontario</i><br/><i>Chairman</i><br/><i>Burns Fry Limited</i><br/><i>(investment dealers)</i></p> | <p><sup>2</sup> Robert F. Calman, 52<br/><i>North Beach,</i><br/><i>New Jersey</i><br/><i>Chairman</i><br/><i>Echo Bay Mines Ltd.</i><br/><i>Vice Chairman,</i><br/><i>IU International Corporation</i><br/><i>(diversified services</i><br/><i>company)</i></p> <p><sup>3,4,5</sup> John Gilray Christy, 52<br/><i>Philadelphia,</i><br/><i>Pennsylvania</i><br/><i>Chairman and President</i><br/><i>IU International Corporation</i><br/><i>(diversified services</i><br/><i>company)</i></p> <p><sup>2,4,5</sup> Egerton W. King, 65<br/><i>Edmonton, Alberta</i><br/><i>Director and</i><br/><i>Past President</i><br/><i>Canadian Utilities Limited</i><br/><i>(utilities holding</i><br/><i>company)</i></p> <p><sup>2,4,5</sup> Peter L. P. Macdonnell, 65<br/><i>Edmonton, Alberta</i><br/><i>Partner</i><br/><i>Milner &amp; Steer</i><br/><i>(barristers and solicitors)</i></p> | <p><sup>3,4</sup> John M. Seabrook, 67<br/><i>Salem, New Jersey</i><br/><i>Chairman</i><br/><i>Gotaas-Larsen Shipping</i><br/><i>Corporation</i><br/><i>(ocean shipping</i><br/><i>company)</i></p> <p><sup>5</sup> Robert W. Wolcott, Jr., 58<br/><i>Wayne, Pennsylvania</i><br/><i>Executive Vice President</i><br/><i>IU International Corporation</i><br/><i>(diversified services</i><br/><i>company)</i></p> <p><sup>2,5</sup> John Zigarlick, Jr., 47<br/><i>Edmonton, Alberta</i><br/><i>President and Chief</i><br/><i>Executive Officer</i><br/><i>Echo Bay Mines Ltd.</i></p> <p>Committee members<br/> <sup>1</sup>Audit<br/> <sup>2</sup>Executive<br/> <sup>3</sup>Finance<br/> <sup>4</sup>Compensation<br/> <sup>5</sup>Operations</p> |
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## Officers

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| <p>Robert F. Calman, 52<br/><i>Chairman</i></p> <p>John Zigarlick, Jr., 47<br/><i>President and Chief</i><br/><i>Executive Officer</i></p> <p>Richard C. Kraus, 38<br/><i>Senior Vice President and</i><br/><i>Chief Financial Officer</i></p> | <p>John L. Azlant, 38<br/><i>Vice President,</i><br/><i>Planning and Analysis</i></p> <p>Richard H. Bennett, 45<br/><i>Vice President,</i><br/><i>U.S. Operations</i></p> <p>Alan Broughton, 42<br/><i>Vice President,</i><br/><i>Corporate Affairs</i></p> <p>Leo D. Kirwan, 53<br/><i>Vice President, Exploration</i></p> | <p>Robert C. Phillips, 61<br/><i>Vice President,</i><br/><i>Canadian Operations</i></p> <p>Ronald J. Simpson, 44<br/><i>Vice President and</i><br/><i>Treasurer</i></p> <p>Hugh F. Tamblyn, 51<br/><i>Vice President,</i><br/><i>Transportation</i></p> <p>Robert L. Leclerc, 40<br/><i>Secretary</i></p> |
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*Front cover: Helicopters  
are used extensively in  
Echo Bay's northern  
exploration program. Here  
a diamond drill is being  
moved to a new location  
on the Lupin property.  
Below: Lupin head frame.*



**Echo Bay Mines Ltd.**  
3300 ManuLife Place  
10180 101 Street  
Edmonton, Alberta  
Canada T5J 3S4