ECHO BAY MINES

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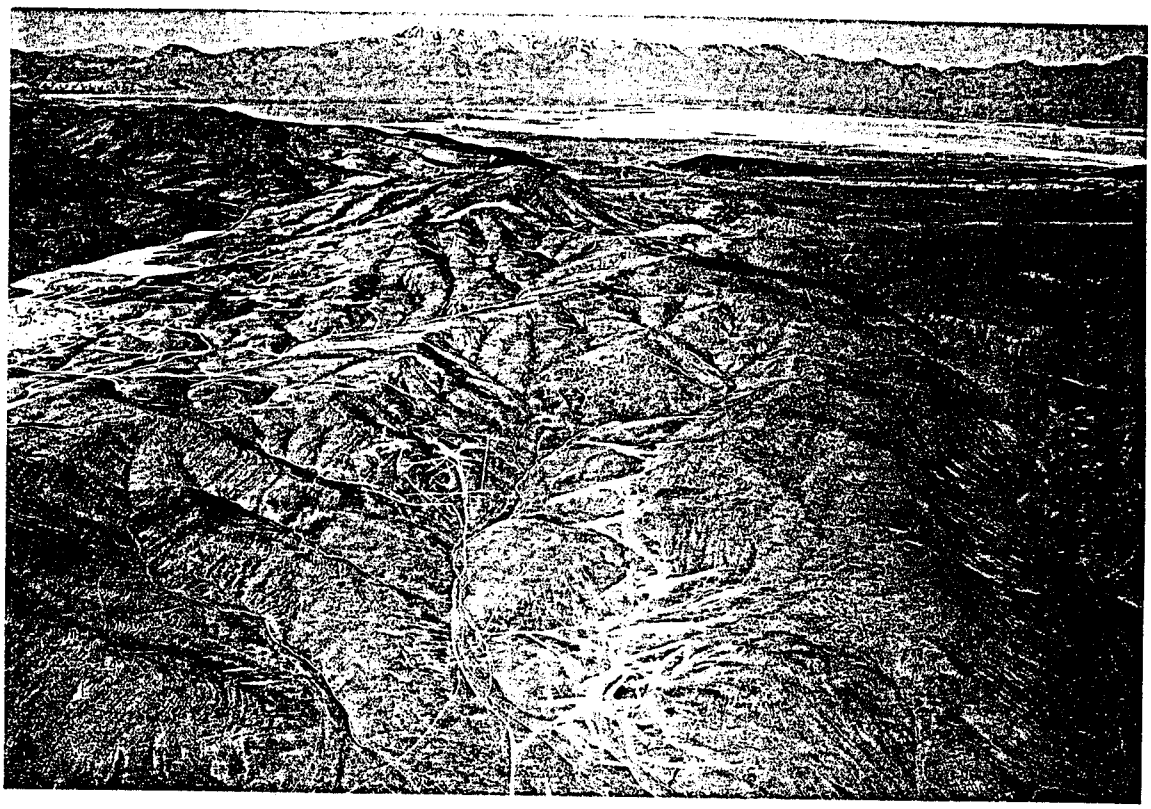
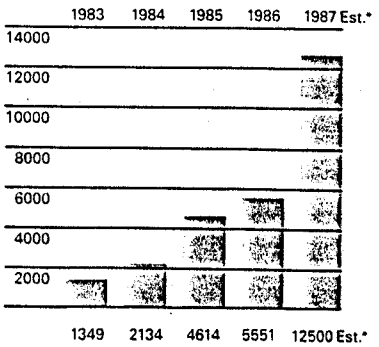
Item #12

A Special Report to Shareholders on the Cove Discovery

Four million ounces of gold and 250 million ounces of silver mineralization at Cove will have a major impact on Echo Bay's reserves and production.



Drill access roads crisscross the surface of the Cove deposit in central Nevada. The McCoy mine can be seen off to the left.



Year-end gold reserves
thousands of ounces
**estimate includes approximately 5.5 million ounces of gold and gold equivalent for Cove*

Dear Shareholder,

By far the most important event in 1987 for Echo Bay has been the Cove gold and silver discovery, one mile from our McCoy mine in Nevada. This report describes what we have found to date and what our preliminary plans are.

Much of what follows later in this report is quite technical in nature. We have tried, especially in this section and in the diagrams, to present essential information in non-technical terms so that the fundamentals can be easily understood.

To date, 7.5 million ounces of mineralization

The Cove discovery hole was drilled early this year. We have been drilling step-out* holes to find the outer limits of the gold and silver-bearing mineralization.* Due to many of our exploration holes bottoming in mineralization, we have embarked on a deeper exploration program.

Our work is not over. However, to date we have outlined an area of mineralization estimated to contain four million ounces of gold and 250 million ounces of silver. This mineralization is within the light red boundary shown on page 6. If we convert the silver to gold at current market prices for both metals, the silver is equal to over 3.5 million ounces of gold making the total mineralization the equivalent of 7.5 million ounces of gold.

A word of caution. At Cove, we will have to drill holes every 200 feet to have sufficient information to categorize the mineralization as geological reserves.* So far, much of the area has been drilled with holes 400 feet apart.

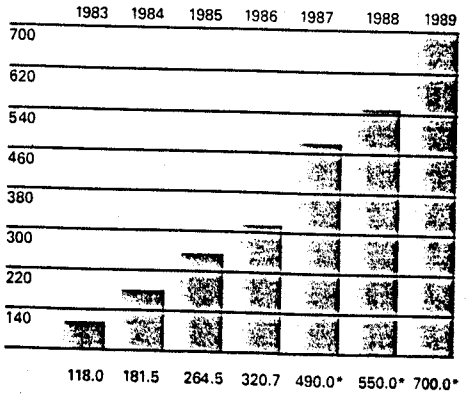
Another word of caution. A "geological" reserve is not the same as a "mineable" reserve. The latter can be determined only after a mine plan has been developed. Almost invariably some reserves are lost in the process, as it is simply not economic to mine and process all of the geological reserves.

Because of the still-changing situation at Cove, it is too early for us to have a mine plan.

For purposes of this report, we have assumed that 70 percent of Cove's 7.5 million ounces of mineralization will be converted to probable mineable reserves once a preliminary mine plan is in place. That plan is expected in early 1988. The chart on page one depicts the estimated Echo Bay gold-equivalent reserves at year-end 1987, and includes approximately 5.5 million ounces for Cove.

Let's put the Cove discovery in perspective. When we acquired Tenneco's precious metals division in late 1986, its proven and probable reserves were 1,044,600 ounces of gold, together with another 460,000 ounces of possible gold mineralization. This totals approximately 1.5 million ounces. There were no reserves for Cove, as it had not been discovered. Cove's current precious metals mineralization is five times as great as the total mineralization for all the Tenneco properties at the time of acquisition.

We can look at the impact in another way. At the end of 1986, Echo Bay's company-wide proven and probable reserves were 5.6 million ounces of gold, including the reserves acquired from Tenneco. Although we expect to add more reserves over time at our other mines, the fact is that we have found substantially more ounces of gold and silver mineralization at Cove so far this year than the total proven and probable reserves of Echo Bay at the start of the year.



Total gold production
thousands of ounces
**estimates*

Further step-out and deeper drilling
The Cove mineralized area has not been defined to the north or to the northwest. We continue to drill step-out holes in these directions. Moreover, Cove is open at depth—that means that we don't know how deep the mineralization goes. Our earliest holes only went down to about 500 feet. We found excellent mineralization, primarily gold, in a limestone formation just below the surface, which is shown in yellow in the cross section of the deposit, page 7.

This summer we drilled some 1,000-foot holes north and east of the original ones and discovered more gold and some very attractive grades of silver in the deeper conglomerate* rocks. Many of these holes bottomed while still in mineralization, as those rigs simply could drill no deeper.

We have just obtained two rigs that are now drilling down to 1,500 feet. The five holes drilled to date on which we have assay information have also bottomed in mineralization. Drilling of 1,500-foot holes at Cove will continue and a rig has now been located that is capable of drilling even deeper holes.

Land position
We have an excellent land position at McCoy/Cove. The claim block covers an area of over 75 square miles and the nearest boundary is three miles away from the Cove deposit.

Exploration plans
For 1988 our exploration program at Cove includes:
(1) Further step-out drilling to establish the limits of the mineralization;
(2) Drilling in the original discovery area to determine the extent of mineralization at depth;
(3) In-fill drilling at Cove, in conjunction with a mine plan, to enable us to categorize the mineralization as probable mineable reserves;
(4) Metallurgical testing and the development of a mine plan; and
(5) The search for new gold and silver deposits on the McCoy claim block.

Cove production in 1988
By the end of 1988, we expect to have an open pit, heap leach operation using the top portion of the Cove orebody. Some areas of this upper zone have grades averaging as high as 0.185 ounces of gold and 1.8 ounces of silver per ton.

We are still studying how best to mine the lower zone. The options are a large, open pit mine, or a combination of an open pit for the upper level and an underground mine for the lower level. We need to know more about the deposit—size, depth, metallurgy and ground conditions—before all the key decisions can be made.

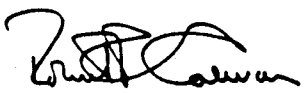
Planning is underway to construct a 5,000 ton-per-day mill at the McCoy site for production in 1989. It would process high-grade material from both McCoy and Cove. At present, McCoy ore is processed using the simpler heap leach process. That's the most cost efficient method for low-grade ores. But milling increases the recovery rate, improving the return on high-grade ores. We believe that McCoy/Cove, operated as a single production unit, can profitably use both processes to handle material in the years ahead.

Based on current plans, our initial open pit, heap leach and milling operations should produce approximately 225,000 ounces of gold annually and about 2,500,000 ounces of silver from Cove. Cash operating costs are tentatively estimated at $150 per equivalent ounce of gold during the early stages of production.

If we successfully upgrade the Cove mineralization to reserves, we will need more mill capacity than 5,000 tons per day. Facilities will be designed to enable a substantial increase in capacity during the years ahead.

Who found Cove
Credit for the geological detective work that led to Cove's discovery goes to geologist David Emmons and the exploration team that transferred to Echo Bay when we acquired Tenneco's precious metals division late last year. They continue their efforts to define the limits of Cove while actively searching for new, similar deposits. Cove was discovered shortly after the acquisition. Echo Bay can't take credit for initiating the program. That belongs to Tenneco. We were simply the owners when the big discovery was made. That's the luck of the mining business.

The story of our Cove discovery is growing and changing every day. We will continue to keep you informed as we learn more about this important Echo Bay discovery.



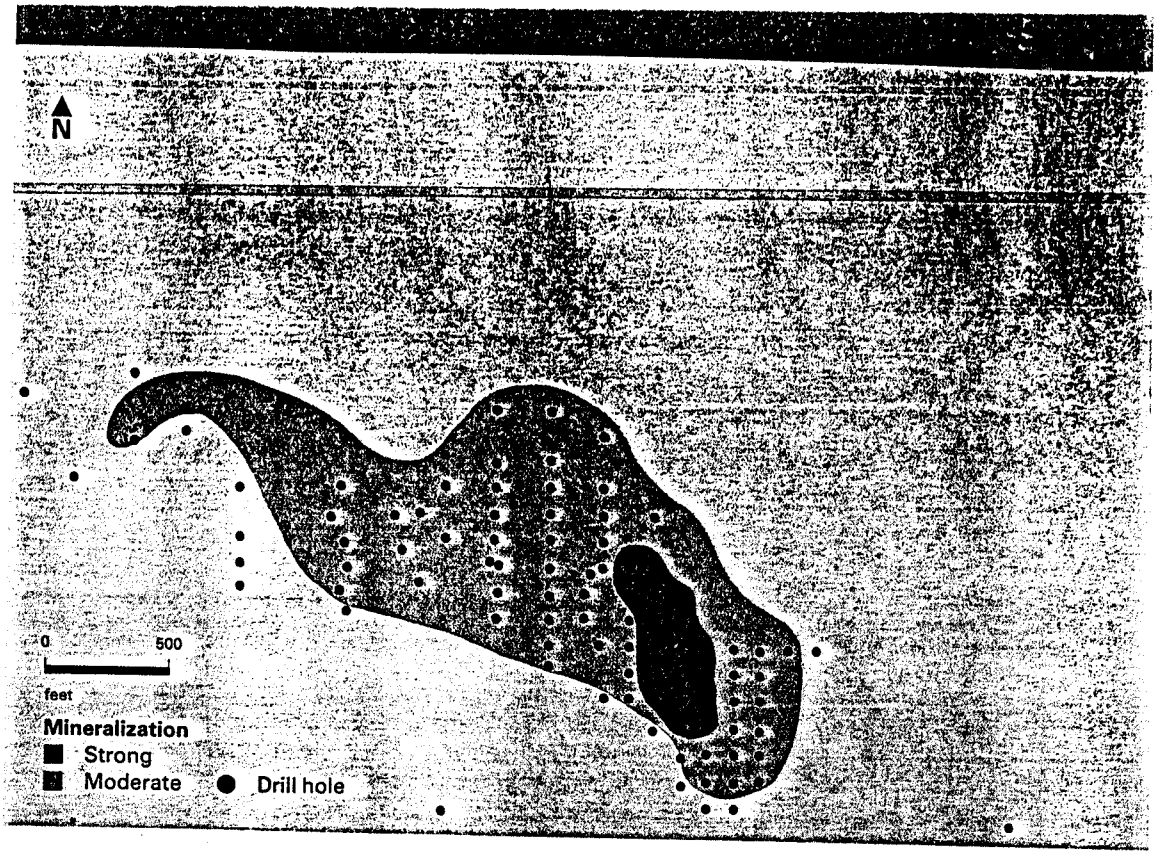
Robert F. Calman
Chairman

John Zigarlick
President

December 23, 1987

*See Glossary, page 8

Intensity of mineralization



March 31, 1987
Our announcement of the Cove discovery on March 31, 1987 was based on assay results from 42 drill holes, most of which were only drilled to 500 feet. The red shows the most intense area of mineralization.

The Cove discovery

History

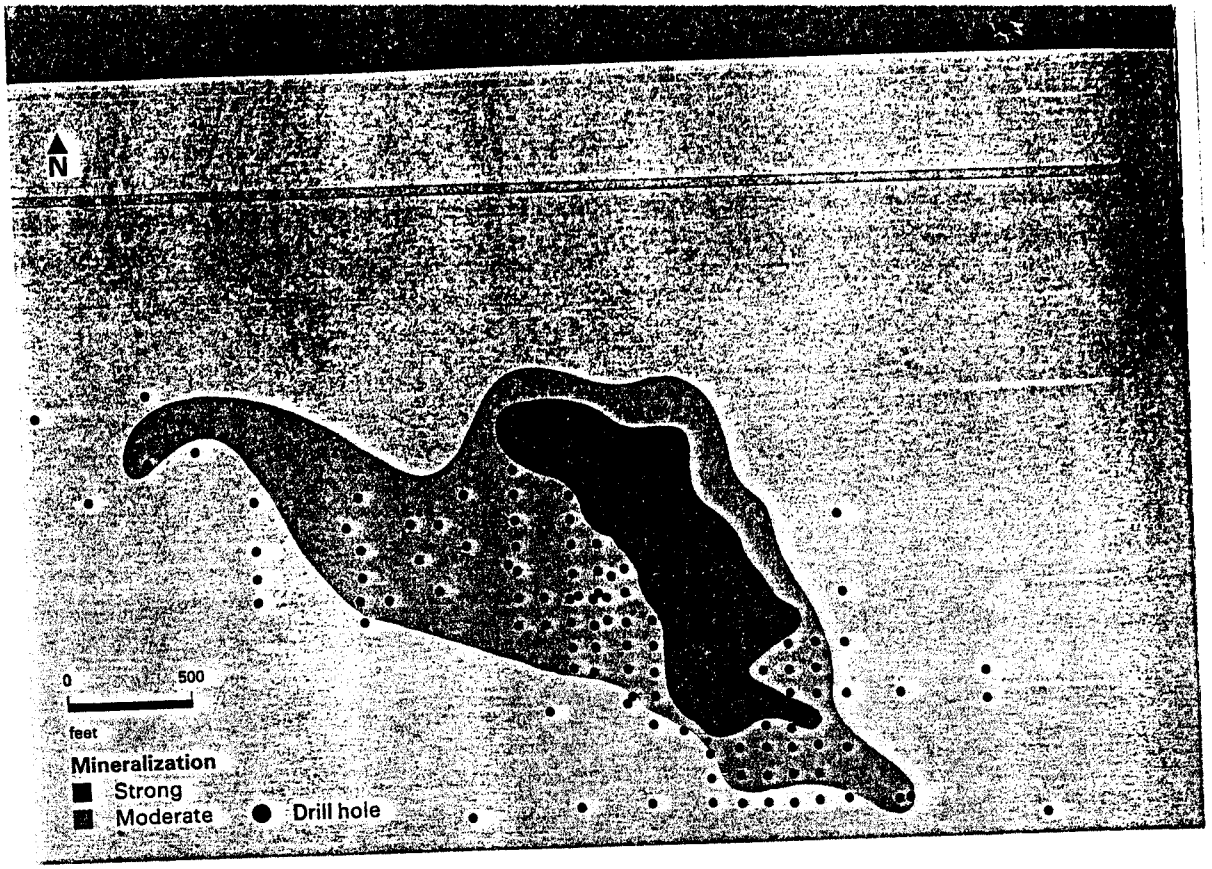
Echo Bay's McCoy gold property, which encompasses the Cove discovery, is located 30 miles southwest of the town of Battle Mountain in north central Nevada, and 15 miles southwest of Battle Mountain Gold Corporation's Fortitude mine.

Joseph H. McCoy made the original discovery in 1914, but no significant production was reached until 1928. At that time, high-grade gold was discovered at the Gold Dome Mine. This discovery started a small gold rush in the district. In 1930, there were 75 people in the McCoy gold camp. The camp declined in the 1930's; by 1938, it was nearly deserted. Total gold production from the district for that period was less than 10,000 ounces. The district was inactive until the 1960's, when several companies examined it for porphyry-type copper mineralization and gold.

In 1969, Summa Corporation, a company owned by the late Howard Hughes, purchased the property. Summa drilled over 200 holes into what is now the McCoy gold deposit. Houston Minerals, a predecessor of Tenneco Minerals Company, purchased the Summa holdings in 1977 following Howard Hughes' death. Houston Minerals drilled another 120 holes into the deposit. In 1981, they established a geological reserve of 300,000 ounces, which at that time was not considered economic. The property was then leased to a subsidiary of Consolidated Gold Fields PLC, the world's largest gold mining company. In late 1984, Gold Fields concluded that the property was still uneconomic and turned it back to Tenneco. During the period of its ownership, Gold Fields added substantially to the McCoy claim block.

Following a detailed reappraisal, Tenneco decided to place McCoy into production as an open pit, heap leach operation. Development began in September 1985 and the first gold was poured in April 1986. During this period, Tenneco initiated a detailed exploration program, both in the mine area and in the surrounding claim block. The mine area exploration, under the direction of geologist Bruce Kuyper, was successful and more than doubled the mineable reserve to 615,000 ounces of gold.

Echo Bay Mines acquired Tenneco's precious metals properties in November 1986, mainly for the potential of the McCoy property.



August 27, 1987
On August 27, when we announced geological reserves of 1.2 million ounces of gold and 53.3 million ounces of silver, it was based on the assay results from a total of 168 drill holes. Most of these reached depths of less than 1,000 feet.

A geological detective story
Working on the principle that the best place to find gold is in the vicinity of a gold mine, a district exploration program was started by Tenneco in January 1986. In an eight-square-mile area around the McCoy mine, 500 stream-sediment samples were collected. Seven samples from the Cove area contained unusually high amounts of gold and silver.

To find the source of this mineralization, the next step, in June and July, was to map the geology of the immediate area and take chip samples from the limited number of rock outcrops. Ten of these chip samples contained abnormally high mineralization and two contained values that were actually ore grade material. The area was extensively covered by overburden. To get a better idea of the extent of the mineralization, 150 samples of soil were collected on a 100-foot by 200-foot grid. Soil represents weathered rock and, unless naturally moved some distance, it reflects the geology and mineralization of the underlying bedrock. The assay results were plotted on a grade contour map, and they indicated a zone of mineralization in the underlying rock that was 3,000 feet long and 500 feet wide.

To further examine this mineralization, seven trenches were bulldozed down to bedrock in October and November. Altered and mineralized rock was found in every trench and sampling indicated a significant portion of the rock was ore grade.

Up to this point, only surface mineralization had been identified by the program, but the work indicated excellent drill targets. In the three months January to March 1987, shortly after the acquisition by Echo Bay, 42 holes were drilled with depths ranging from 95 to 475 feet. Thirty-four of these holes encountered ore grade mineralization, and the seventeenth hole was the first to indicate ore that was sufficiently high grade to justify milling. The Cove discovery was announced by Echo Bay on March 31, 1987.

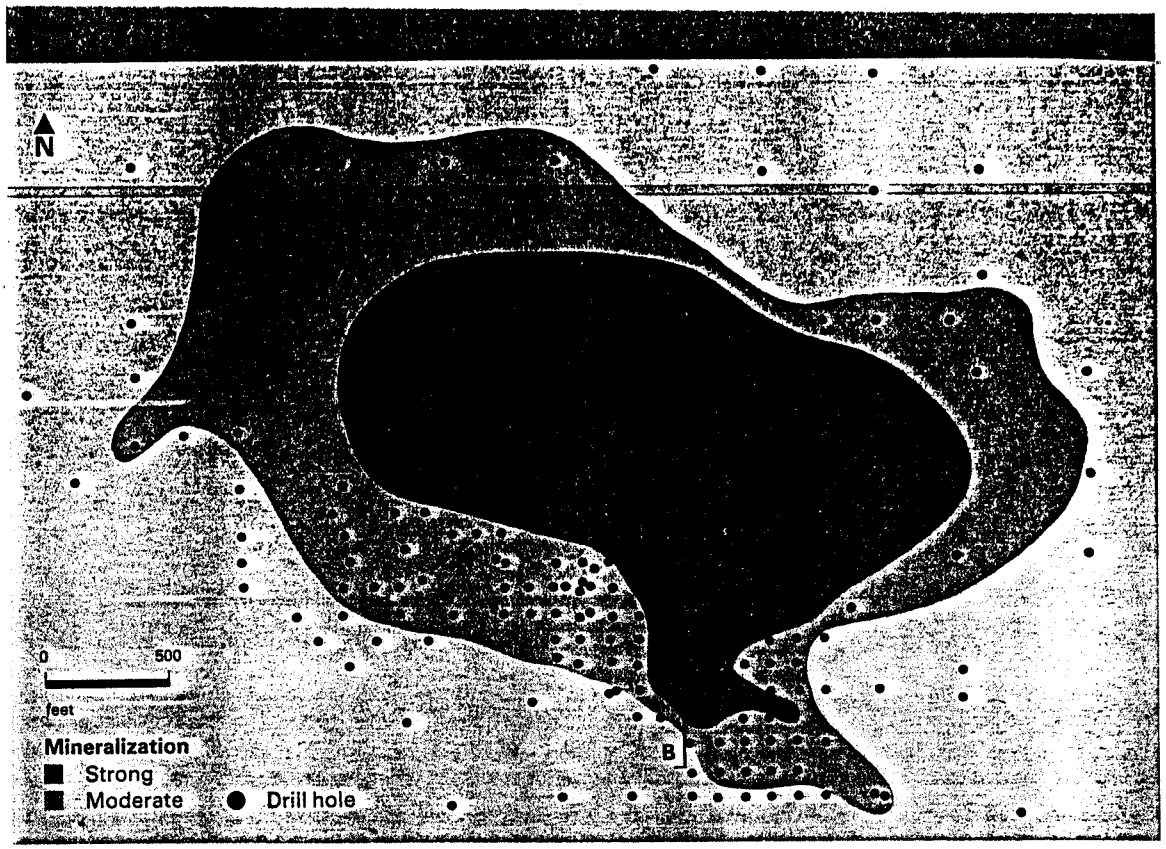
Geology of the Cove deposit
The Cove deposit is hosted in gently dipping sedimentary rocks that are Triassic in age, approximately 200 million years old. These rocks are part of the same formations that host the McCoy deposit, one mile to the southwest.

*See Glossary, page 8.

November 15, 1987

As of November 15, the cut-off date for information in this report, the deposit contains an estimated four million ounces of gold and 250 million ounces of silver mineralization. This estimate is based on our assay results from 205 drill holes. Only five of these holes reached depths of 1,500 feet and all five ended in ore-grade mineralization. A cross section of 14 holes along the line A-B is shown in the diagram to the right.

We see potential to add mineralization by drilling step-out holes to the north and northwest and by redrilling some of the more shallow holes.



Two major zones of mineralization have been identified. The upper zone is in limestone and shale where gold and silver are associated with clay. When the rock was altered by mineralizing fluids about 37 million years ago, this clay developed along fractures and permeable horizons. At that time, iron sulfide (pyrite) was probably fairly abundant, but it is now almost entirely oxidized. Mineralization shows good continuity and occurs to depths of approximately 300 feet. This upper zone accounts for about 500,000 ounces of gold and 15 million ounces of silver included in the announced proven and probable geological reserves.

As drilling progresses, additional reserves are expected to come primarily from the lower zone. One hundred to three hundred feet of barren rock separate this lower zone from the upper zone. The lower zone is hosted in conglomerate and sandstone. Free gold and silver sulfides* (acanthite and tetrahedrite) are associated with abundant iron sulfides. The sulfides average about five percent of the rock, but can be as high as 90 percent in places. Some horizons with a high carbonate content appear particularly susceptible to mineralization.

Assays in these zones reach as high as 2.2 ounces of gold and 36.3 ounces of silver per ton over thicknesses up to 20 feet.

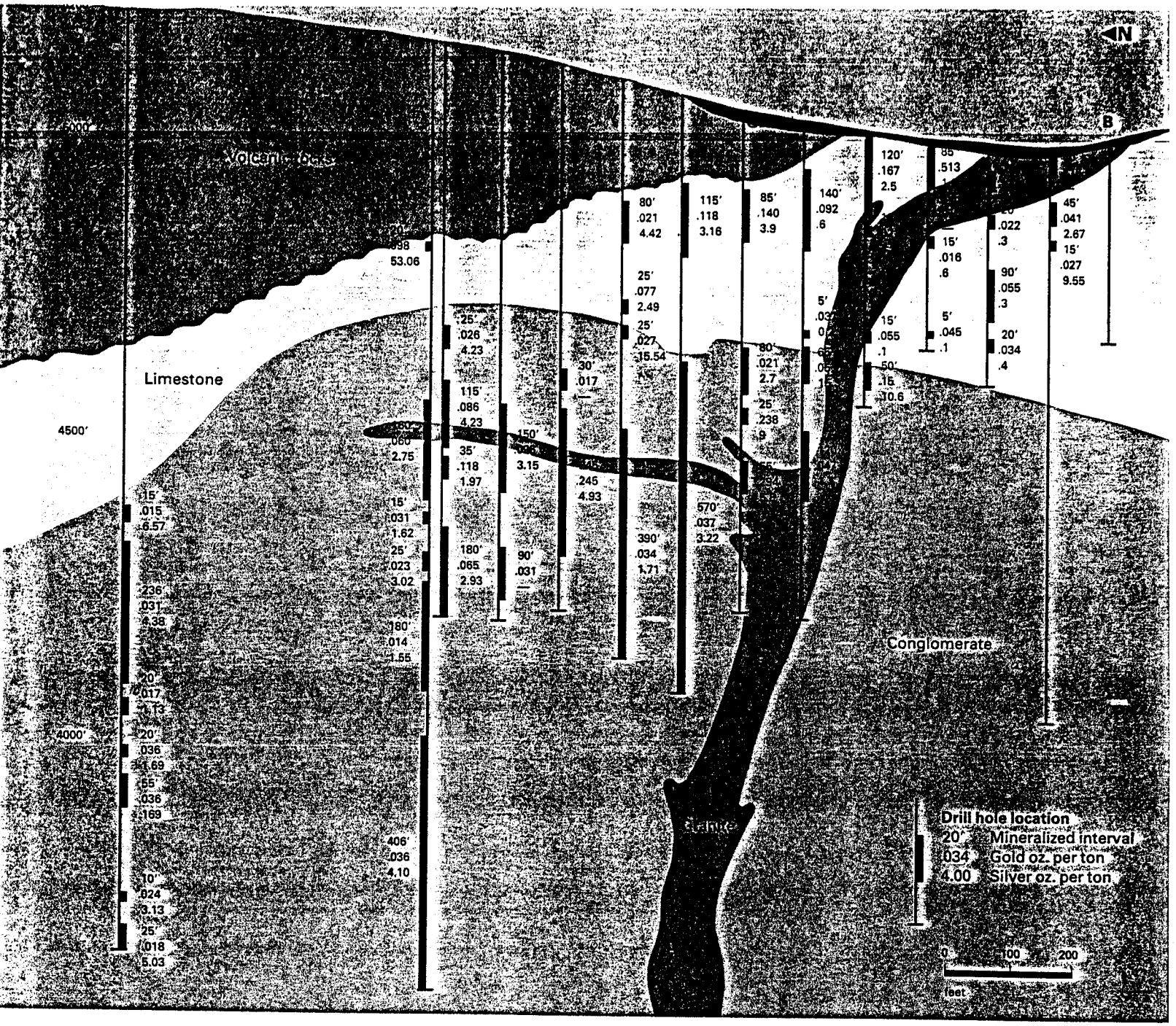
Development program

Four reverse circulation drill rigs and one diamond core rig are now working 24 hours a day on the property. In addition, large diameter core drilling for metallurgical test samples and geological information has just been started.

To define the overall limits of the mineralized system, current development emphasis is on widely-spaced step-out drill holes. An induced polarization (IP)* geophysical survey has indicated the general lateral distribution of iron sulfides with which the gold and silver are associated, but the results give no indication of precious metals content.

Once the limits of the orebody are known, in-fill drilling on 200-foot centers will be necessary to upgrade the mineralization to the probable reserve category. At the present time, there is enough information on the Cove deposit to begin a feasibility study on the planned 5,000-ton-per-day mill. The sulfide mineralization at depth appears to be amenable to conventional milling processes, but a considerable amount of additional metallurgical testing is needed to confirm this assumption.

Of the 205 holes drilled to date, 48 bottomed in ore grade values as the rigs had reached their depth limitations. Two rigs that have recently arrived on the property are drilling to depths of 1,500 feet or more.



The Cove cross section

This cross section of 14 holes shows the mineralization and is referred to as line A-B in the plan on page 6.

The Cove deposit is open at depth—that means that we don't know how deep the mineralization goes. Initial drilling went down about 500 feet. We found excellent mineralization, 500,000 ounces of gold, in a limestone formation near the surface.

This summer we drilled some 1,000-foot holes and discovered a significant, larger deposit of gold and silver within a conglomerate formation that lies below the limestone. Many of these holes bottomed in mineralization. Our drilling rigs stopped at depths of 1,000-1,200 feet, which is the limit of the rigs' drilling capability.

Recently, we obtained two larger rigs that are drilling to 1,500 feet. As you can see from the two holes at the far left of the diagram, these holes have also bottomed in mineralization in the conglomerate formation. We're continuing to drill to greater depths.

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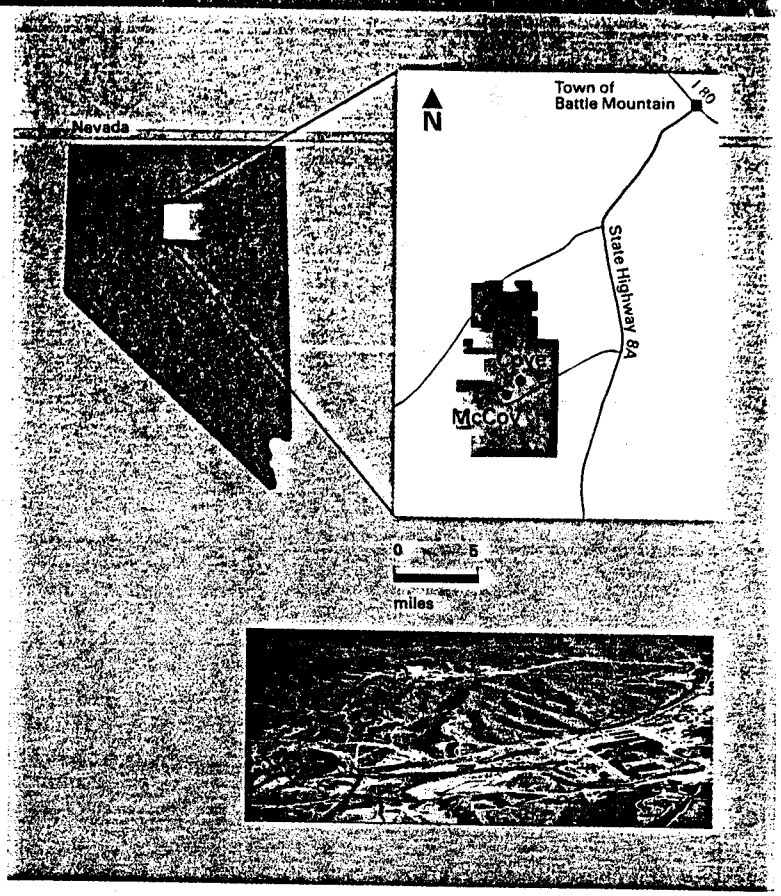

Within the 75-square-mile McCoy claim block, you can see the proximity of the Cove deposit to the McCoy mine. Note, too, the short distance from the claim block to the state and interstate highway system.

Looking northeast, the drill roads crisscross the Cove deposit in the upper center. The McCoy open pit mine is to the left in the foreground and the heap leach pads to the right.

Glossary of terms
used in this report

Conglomerate
The consolidated equivalent of gravel, and one of five basic categories of rock types at Cove.

Exploration drilling
Rotary or diamond-core drilling to establish the presence of mineralization. Based on the continuity of mineralization at Cove, drilling on 200-foot centers defines geological reserves.

Geological reserve
In situ reserves established by exploration which are known to be economically extractible in concept, but not in detail. Geological reserves would be upgraded to mineable reserves, when a mining plan had been prepared.

At Cove, mineralization greater than 0.03 ounces per ton of combined gold and gold equivalent is classified as ore.

Gold equivalent
Silver is converted to equivalent ounces of gold using an approximation of the current silver-to-gold price ratio. In this report, a ratio of 70 to 1 has been used.

Grade thickness
The average grade of a drill hole intersection(s) multiplied by the thickness of the intersection(s). The resulting figure indicates the concentration of mineralization in that hole. When the value for each hole is plotted, the mineral intensity of a deposit can be easily identified. (See diagrams, pages 4, 5 and 6).

Horizon
A distinctive, thin bed within a rock formation.

Induced polarization (I.P.) survey
A geophysical survey that induces an electric charge into the ground. The strength of the return signal indicates the sulfide content of the rock. At Cove, gold and silver are associated with iron sulfides.

In-fill drilling
Drilling between widely spaced holes to establish or upgrade the reserve classification.

Mineralization
A rock containing ore minerals or minerals indicative of ore.

In this report, mineralization refers to the presence of gold and silver.

Step-out drilling
Drilling 400 feet or more beyond the boundaries of known mineralization to find the limits of the deposit. This drilling does not define proven or probable geological reserves, rather it establishes the continuity or limits of mineralization.

Sulfide
A mineral compound characterized by the linkage of sulfur with a metal or semimetal. Iron sulfides, primarily pyrite, are present at Cove and are associated with gold and silver.