HEART OF GOLD: COLORADO

DENVER NOW CAPITAL OF U.S. GOLD INDUSTRY
Tom Hendricks has held onto his dream for more than 35 years. It's a powerful dream: the fierce pull of honest wealth brought out of the ground with your own two hands, a pull that has historically moved men, towns, civilizations and mountains. High above Nederland, in alpine Boulder County, Hendricks—who's business card names him "Gold Miner, Calais Resources Inc., President and CEO"—has been steadily working his claims, consolidating most of the mineral rights near his mine and tunneling thousands of feet into Caribou Hill.

Using 21st century digital technology, Hendricks has mapped what he says is a massive gold deposit that might become Colorado's largest find in half a century. More importantly, Calais Resources' planned New Millennium mine, which Hendricks hopes will begin commercial operations in 2009, will be a model of environmental responsibility. "An example," said its CEO, "of a green mining company."
"We've come from being a small pick-and-shovel mine to what may be the next big underground gold producer," Hendricks said, "and every bit of it a full-circle green environmental operation." Under Calais Resources' business plan, more than 120,000 ounces of gold and 3 million ounces of silver could be extracted annually for upwards of 20 years. At today's market prices, that's a haul worth more than $73 million a year, and perhaps up to $2 billion over the life of the mine.

But Hendrick's proposed underground operation is an anomaly within the international gold-mining industry. Led by the world's largest producer — Denver-based Newmont Mining Corp. — the business today is dominated by powerful multinational conglomerates like Golden Cycle Gold Corp. and AngloGold Ashanti Ltd., whose joint-venture Cripple Creek and Victor Cresson Mine is Colorado's only active commercially producing gold mine. This modern, open-pit, cyanide-leaching operation utilizes the power of scale to extract minute quantities of gold from enormous amounts of low-grade ore. While Newmont, AngloGold Ashanti, Gold Fields Ltd. and other mining companies have come under increasing pressure from environmental groups in the U.S. and abroad for operating such potentially hazardous mines, the value and demand for the gold they produce has greatly increased, especially since 9/11 and throughout a long-term devaluing of the U.S. dollar.

Today, although only a fraction of the world's gold supply is extracted from the nearby mountains, Denver continues to function as America's intellectual gold mining center. The city remains "a hub of exploration," Hendricks said. "It represents part of the old West combined with the new — using space-age technology to find the dream of the mother lode."

Across Colorado, the nation and beyond, concern over gold-industry mining methods exploded in 1993, when, in order to avert the poisoning of an entire river, the federal Environmental Protection Agency seized control of the Summitville Mine, an open-pit operation 11,000 feet high in the San Juan Mountains in southwestern Colorado. Typical in many ways of the majority of surface mines that have opened worldwide since the 1970s, Summitville is remembered today as an example of what can go terribly wrong at such a mine where thousands of tons of crushed low-grade ore is piled onto large pads and doused by cyanide solutions that gradually percolate through the rock, leaching gold out of the mix.

Today, as leach pads are constructed, all American mines are required to install several layers of water-proof liners that prevent any cyanide solution from getting into groundwater and contain all run-off within the operation's boundaries. Yet it is up to state and federal inspectors to ensure these controls are functioning properly.

With Summitville's liners torn and their other environmental controls failing, the operators, Galactic Resources LLC (a Canadian corporation) declared bankruptcy and fled the country. "In the aftermath," said Stuart Sanderson, president of the Colorado Mining Association, "we studied the circumstances ... and worked cooperatively with state and environmental groups to prevent the recurrence of similar incidents, by strengthening Colorado's mining laws." Those laws are now among the most stringent in the country.

However, damage to the Alamosa River has already been done. In 1994 Summitville was declared a Superfund site, and more than $150 million of taxpayer monies have been spent on stabilization and reclamation efforts at the mine.

While some studies do purport that the Alamosa had already been tainted with both naturally occurring mineralization and 19th century mine run-off prior to Summitville's opening, undoubtedly, according to U.S. EPA reports "pollutants killed aquatic life and threatened the irrigated farmland downstream." Today, although much of the river and surrounding ecosystems remain envi-
ronomically compromised, the "water quality of the Alamosa River downstream of the site has improved considerably and some residents have reported the return of aquatic life to impacted areas of the river."

**NOT JUST A HUB FOR AIRLINES**

As the gold-mining center of the United States, Denver hosts a majority of the nation's most experienced international mine-exploration companies, consultants, geologists, research laboratories and mining lawyers — and each year, these groups are further enriched by new graduates from the Colorado School of Mines. Together, these elements represent a core of decision-makers for today's hi-tech and capital-intensive gold industry, and they provide a collective reason for so many of the largest gold, precious-metal and hard-rock mining companies to have situated their global or North American headquarters in the metro area.

Although Denver trails Toronto and Vancouver, Canada, and Johannesburg, South Africa, in being the gold-mining industry's global hub, only Denver can boast of being home to the world's largest gold producer. Perched atop the Wells Fargo ("cash-register") Building at the edge of Downtown Denver, the Olympus-like views from Newmont's headquarters offices are fitting for such a powerful corporation.

In addition to the 280 workers at Newmont's Denver office — a small fraction of its total of 14,000 worldwide — Newmont's 75,000-square-foot Plato Malozemoff Technical Facility in the Tech Center employs another 100. Holding an impressive patent portfolio, this modern laboratory is one of only a handful worldwide that specializes in hard rock and precious-metals research. Newmont's Malozemoff employees not only search for new gold deposits, but develop the procedures and chemical processes to make them recoverable. Newmont will begin construction this summer on a 20,000-square-foot addition to the laboratory.

Just one Interstate 25 exit south of Newmont's Tech Center lab are the global exploration offices of Gold Fields Ltd., another of the industry's major producers. From there the company's staff of 14 actively directs exploration throughout the Western Hemisphere. "We spend, not just here, but globally, approaching $100 million just including exploration," said Christopher Thompson, non-executive chairman of Gold Fields. Although they are not currently mining in the United States, "the reason we moved to Denver," explained Thompson, "is the same reason that the tech industry moved to Palo Alto. It's because of all the other resources that are here. In Denver, there is the School of Mines, the research facilities, consulting firms. We have access to a central pool of mining expertise."

**ON THE GROUND IN VICTOR**

Back in the 90s, just as Summitville was making front-page headlines in the state's newspapers, AngloGold Ashanti's Cripple Creek and Victor Cresson Mine was in the final stages of a permitting process for another round of expansions. "We were opening a new area of the mine, and building a new heap-leach facility," said Chuck Rech, manager of public relations. "While technically we were grandfathered in (under the old
Public companies

mining laws), we delayed our expansion and went back through the entire process so that we could be re-permitted under the new laws.” Since then, CC&V’s massive operations have been under tremendous scrutiny by both regulators and the environmental community.

While all the majors attempt to foster good community relations, they have not been equally successful. One inherent difficulty is that companies are mining in increasingly remote areas of the world, and often Newmont, AngloGold Ashanti and others are subsequently forced into nation building. As Thompson, of Gold Fields, related, “In some cases we become the (economic) engine of at least the local community ... and sometimes were the engine of the entire economy.” Huge, powerful and wealthy western companies moving into small, remote regions in developing nations is a recipe for political backlash, something Newmont has faced over the past year in both Indonesia and Peru.

In the U.S., however, a fear of environmental consequences is often tempered with a desperation to attract and retain well-paying jobs, which gold mining — like other extractive industries, provides. AngloGold-Ashanti’s CC&V has maintained its largely positive relationship with the town of Victor and the Teller County community not just by being their largest taxpayer and second-largest private employer but through doing more than just mining gold.

Victor, although it calls itself “The City of Mines,” is an isolated mountain community, barely a town, situated on a plateau west of Pikes Peak and east of the Sangre de Cristos, a long row of teeth pointing skyward in the west. Towering over the town’s brick Victorian buildings to the east, however, are massive gray-and-tan rock waste piles and ruined shafts from a half-dozen century-old mines. Recently, town leaders asked the mining company to protect this “viewsheild” since it is and has been such a huge ingredient in the character of the town. “What people see when they come here,” said Mayor Kathy Justice, “is all we have. We don’t want to lose the view of the old mines, or to have them eclipsed by several hundred feet of new waste rock.”

Justice’s pragmatic support for CC&V is born of knowing what the town was like when there were no operating mines, very little revenue coming in and a dwindling population. Yet, since only a handful of CC&V’s 300 employees choose to live in Victor, the largest direct benefit the town receives from company operations is the $600,000 worth of water the mine purchases — most of the town’s annual income.

But CC&V has created another option. In 1997, CC&V spent $1.2 million to renovate and move the mine’s offices into Victor’s historic Post Office Block. It also, through an agreement with the Southern Teller County Focus Group, has carefully moved dozens of historic mine buildings off its own property and onto land in what’s called Vindicator Valley where, although laden with gold and eminently prospectable, the company and the county group are building a de facto outdoor museum, a series of walkways and preserved mine workings. CC&V also allows tourists to cross its main haulage road as they drive up to the American Eagles Mine overlook, where, at 11,000 feet, oxygen-gasping visitors can watch mine operations, view active leach pads and open pits, and witness first hand what many companies take great pains to prevent the general public from otherwise viewing. In the process, the CC&V has become something of a tourist attraction as well.

But that’s not the future of gold mining. The CC&V may well, eventually, become as outdated and historic as the other old mine workings in Vindicator Valley, primarily because of what Tom Hendricks is trying to do outside Boulder. “In the next 10 years, you’re going to see a worldwide shift to underground mining,” Hendricks said. “They’re starting in Nevada, and that’s the way it will be here in Colorado. With new drilling technology coming out of Sweden, and super hi-tech facilities, it will be much more feasible.

“When we demonstrate that we can do this in a cost-effective and environmentally safe manner,” said Hendricks, “others will come on board to our operating philosophy. There are still some great underground mines out there waiting to be opened,” he said. Keeping his dream alive.