

**Remarks to the Peruvian Mining Convention 2003**  
**By Caterpillar Vice President Tom Gales**

Thank you for inviting me to participate in the Peruvian Mining Convention. The people of Caterpillar – and our associates at Ferreyros – always look forward to this event. We appreciate the opportunity to spend time with – and learn from – such an exceptional group of mining professionals.

2003 has been another challenging year for the mining industry in Peru. Commodity prices are showing signs of stability but remain relatively low. Anti-mining groups have gained momentum in some local communities. And governmental support for mining could always be stronger. It will be interesting to see what comes of the mining summit your president held this week with his counterpart from Bolivia. We hope their discussion brings about positive change in both countries.

Of course, there are already many things to be positive about here in Peru.

Gold producers are having a good year. recent report from the Ministry of Energy and Mines says production for the first seven months of 2003 is up more than 13% over last year.

The copper situation looks good too. July production was almost 7% higher than a year ago ... and year to date, it's running close to 3% ahead of 2002.

In other positive news ... The Antamina team is executing a world-class sustainable development business strategy. So are the folks from Barrick Pierina. I'll have more to say about both of them later.

Pierina is also exceeding its production targets ... and continues to rank among the world's lowest-cost gold producers.

Newmont's Yanacocha mine is another low-cost producer ... and they're meeting their production challenges, too.

Shougang Hierro Peru's iron mine is achieving excellent financial results in a tough economic climate ...

And Southern Peru Copper Corporation has become its parent company's most profitable operation in the world.

At Phelps Dodge Cerro Verde, they're considering an expansion project that will include a new large-scale sulfide operation.

And BHP Billiton's Tintaya mine is restarting their sulfide operation after an 18-month shutdown. I was impressed to hear that during the shutdown, BHP Billiton kept some of their people on partial salary – rather than laying them off immediately. It takes visionary leaders to make those kinds of decisions in a country that does not have high expectations of its mining industry.

Throughout Peru, we see many leaders of that caliber. Strategic thinkers – who are driving their businesses forward – toward very aggressive performance targets. I'd like to spend the next few minutes talking about some of the key challenges leaders face as we guide our organizations to best-in-class. Obviously, many issues compete for our attention and resources ... but I've selected a few critical ones to focus on this morning – three strategic priorities for mineral producers – and their equipment suppliers and product support providers.

Our first challenge is to understand, support and apply the principles of sustainable development ...

A second – and related – priority is the need to continuously improve mine safety.

And finally, we're all called upon to deliver the highest possible return to our investors.

Let's start with sustainable development – a subject we've spent most of the week learning about. I'd like to thank the conference organizers who brought so many experts together to help us acquire a broader perspective on the topic. The sessions have been positive and productive – and I think most of us will leave Arequipa with a better understanding of what sustainable development actually is ... and why it's so important.

You're fortunate to have some of the world's leading practitioners of sustainable development right here in your country. Antamina and Barrick Pierina are both known around the world as mines that are doing it right. They're leaders and innovators – running their businesses with a “triple bottom line” mentality – measuring success in terms of economic – environmental – and social performance.

From an environmental standpoint, Antamina is using an innovative process to transport copper concentrate from the mine to the seaport – a distance of more than 300 kilometers. The material is not trucked to the port ... it flows through an underground pipeline. The pipeline doesn't use fossil fuel. It doesn't generate emissions. And it was constructed with very minimal impact to the Andean habitat – unlike the road that would have been required to support truck transport.

This project has another interesting environmental aspect. The copper is mixed with water before it flows down the mountain. That water could be discharged into the ocean after it arrives at the port and is separated from the copper concentrate. But Antamina doesn't operate that way. Instead, they capture the water, purify it and reuse it for irrigation. They've established an experimental farm adjacent to the port – right in the middle of the seacoast desert. It's a self-contained ecosystem where dozens of species of plants and animals are flourishing – thanks to the mine's waste water. It would be more cost effective for Antamina to dump that water into the ocean. But their willingness to reuse it sends a strong message to the community – and the country – about their commitment to conservation and environmental responsibility.

The people from Pierina have an excellent environmental record too – and like their associates at Antamina – they are also very active in the human side of sustainable development. They work in partnership with the local people in their communities on a wide range of projects. Things like cleaning up local drinking water ... eradicating air- and water-borne diseases ... increasing the quality and quantity of the food supply ... preparing children to succeed in school ... providing young men and women with vocational training ... and helping local entrepreneurs launch and sustain new businesses.

Members of the communities around the Pierina mine are fully engaged in these projects. They help define problems – set priorities – propose solutions – develop and execute work plans – and measure results. The intent is to help the local people acquire the capacity to help themselves ... so they can raise their standard of living and improve quality of life – now – and long after the mine is gone.

These two mines – and others like them – here in Peru and around the world – are putting the principles of sustainable development to work in many different ways. But despite their unique approaches, they all have several things in common.

Starting with visionary leaders. Senior executives in these mining companies are committed to the sustainable development business model. They demonstrate that commitment by investing in environmental and social programs – even during tough times. They tend to be open, approachable people – willing to acknowledge the mistakes of the past – willing to operate with a high degree of transparency.

These leaders know how to staff their organizations too. They've hired great people – with expertise in many fields ... including environmental science, sociology, psychology, agronomy and communications. These folks are passionate about their work. They exhibit a deep and abiding respect for the local communities they support. And they're persistent to the end – always willing to forge ahead – no matter how difficult and time-consuming the change process may be.

Unfortunately, the general public knows little – if anything – about what's being accomplished in mines like Pierina and Antamina. To tell the truth, some members of the mining industry aren't very well informed either. Caterpillar believes it's time to make more people aware of the gains your industry is making. That's why we're developing an educational film that will showcase sustainable development in action at mines around the world.

Some of you may recall the program we produced about 10 years ago. It was called *Common Ground – or Tierra de Todos* – and its goal was to educate people about the importance of mineral products in their daily lives – and the realities of modern mining. Over the last decade, *Common Ground* has been shown to more than 10 million viewers worldwide. While the message is still relevant today, we intend to supplement it with a

focused program on sustainable development. We're excited about the project and appreciate the opportunity to make this film on behalf of our mining partners. You can expect to hear more about it over the next 12 months or so.

The film is just one way in which our company is demonstrating support for sustainable development. We share the mining industry's commitment to sustainability – and are measuring our own success in terms of environmental protection and social responsibility ... as well as economic performance.

One of the key areas of focus in Caterpillar's sustainable development strategy is safety ... and that's the second strategic priority I wanted to talk with you about this morning. Safety is an integral aspect of sustainability – but it's such an important topic that I thought it should be discussed separately.

Improving mine safety is a joint responsibility – shared by mineral producers, equipment suppliers and product support providers. I know all of you are working hard to make your mines safer ... and I know that's a difficult job – in Peru and around the world. Improving the safety culture won't be easy. But I'm confident that – working together – we can help your employees – and their families – work – and live – more safely.

Most of you are already moving along a path of continuous safety improvement. You're executing comprehensive safety strategies – and aiming for very bold improvement targets. You're hiring the best people you can find – investing in additional safety training – and increasing safety-related communications, especially through first line supervisors. You're measuring attitudes about safety – recognizing and rewarding positive behavior – and taking many other steps to help employees understand and accept personal responsibility for safety. It's a daunting job. But you're doing it very well.

Your equipment suppliers and product support providers are committed to help you change the safety culture in your mines. I know the Ferreyros team is focusing on safety improvement in their on-site service operations. And at Caterpillar, we're working on many mine safety initiatives.

For example, we've partnered with an Australian company to promote a state-of-the-art simulation tool for equipment operators. The tool, which is comparable to a flight

simulator, incorporates virtual reality technology. It allows mine employees to learn safe operating practices and be exposed to a variety of emergency situations in a controlled environment. The tool can be used for training on large mining trucks, shovels, wheel loaders and other mining machines. Yanacocha purchased one last year and has found it to be a valuable tool for improving truck operator safety and productivity. One of these simulators is on display at the Ferreyros exhibit here at the convention. Please stop by for a "test ride."

Cat has also launched a multi-million dollar mine-safety research and development initiative. Some of the first product improvements to come out of that investment include the new pressurized cabs for large track-type tractors – which are nearly twice as quiet as the older designs with much better air quality ... and a three-point operator restraint system for large haul trucks ... which will be introduced in Peru and other areas of the world later this year.

Our research people are also exploring better access systems for large machines ... as well as new ways to improve operator visibility ... things like next-generation closed circuit TV technology ... new rearview mirror designs ... and high intensity discharge lighting.

On our longer term research agenda, we're evaluating things like ... air bags and inflatable shoulder restraints ... alertness technologies ... and new fire suppression systems.

Caterpillar has never made a more aggressive investment in mine-safety research and development. We're enthused about the work that's being done today and look forward to bringing you a variety of new solutions to your safety challenges.

So far this morning, I've talked about two very high-level priorities our leadership teams need to be focused on – safety and sustainability. The third priority I want to touch on is more operational in nature.

In today's economy, mineral producers are under tremendous pressure to deliver higher returns to investors. Capital is scarce ... and your financial backers have high expectations ... so every one of you is on a never-ending quest to drive down operating costs, increase efficiency, improve asset utilization and strengthen the bottom line.

While many of you have already done an excellent job cutting costs and streamlining processes, I'd like to suggest that the best way to achieve additional improvements – real breakthrough gains – is to work in closer partnership with your equipment suppliers and product support providers. Use a team approach to evaluate your site, identify improvement opportunities and develop effective solutions.

As we've worked with our dealers and mining partners on site evaluation projects, we've found that the haul roads are often a candidate for continuous improvement. Haulage costs are the largest single contributor to total mining costs ... and nothing affects haulage costs more than the quality of your roads.

What makes a good haul road? A consistent grade from top to bottom is critical. When the grade is consistent, your trucks can maintain a constant speed ... so there are fewer backups and delays ... and more tons moved every hour of every day. There's less shifting required too ... so there's much less wear and tear on the transmission and less rock spillage on haul roads.

Another characteristic of a good haul road ... it extends all the way from the load face to the end of the waste dump or ore discharge. Haul roads that end at the dump deliver faster cycle times, higher productivity, longer tire life, less torsional stress on your truck frames and longer component life.

Good haul roads are also well maintained. Miners who do a good job managing haul road maintenance tend to have safer operations – as well as higher productivity, longer component life and lower operating costs.

A second area that is often overlooked is contamination control. Contaminants, as you know, are always present in mining products. Sometimes they're introduced during assembly. Other times, they enter your machines while they're working or being serviced. Regardless of the source, whenever contaminants invade a system, they impair performance and reduce component life.

In recent years, Caterpillar and Cat dealers have launched an aggressive attack on contamination. We've made major changes in our factories to improve cleanliness on the shop floor. We've also developed a variety of special tools and processes to help dealer and customer technicians reduce contamination during maintenance and service. Caterpillar has asked dealers around the world to participate in a rigorous contamination control certification process. Ferreyros has been through the process – and achieved the highest level of certification. They've earned the 5-star designation – which sets them apart as one of the cleanest Cat dealers in the world.

Why all the interest in grit and grime? Because contaminants have a huge impact on component life and operating costs. A three-year independent study of hydraulic systems found that some hydraulics components last up to 10 times longer with proper contamination control. And at a mine in Indonesia where we implemented a comprehensive contamination control plan, a fleet of large trucks has run more than 30,000 hours without a wheel group failure. Expected life for the wheel group was around 8,000 hours.

Virtually every mineral producer could benefit from a more rigorous contamination control strategy. I'd encourage all of you to talk to your product support providers about how you might improve the cleanliness of your operations. And while you're at it, consider a complete evaluation of your site to determine how you might reduce costs, improve efficiency and earn an even higher return for your investors.

It's about time for me to wrap things up. I've covered some very diverse topics today – from local cultures to contamination control. I believe the broad nature of my comments reflects the wide range of subjects we're expected to be familiar with these days – as we serve in leadership positions in a highly visible, sometimes-controversial global industry.

Much is expected of us ... from our employees, our investors, our governments, the NGO community and the general public. I believe the best way to meet those expectations is to work together – mineral producers, equipment suppliers and product support providers – united in purpose, focused on the future. Collectively we can drive the mining industry forward – and achieve new levels of safety ... sustainability ... and profitability.

Thanks very much for your time and attention ... And on behalf of the men and women of Caterpillar and the Ferreyros organization, I'd like to thank you for your confidence in our products and services. We appreciate the opportunity to serve you ... and look forward to a working as your partner for many years to come.