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Coal Age

FEATURE ARTICLES

- 20** Washington Delivers for the Coal Industry
The Energy Policy Act of 2005 sets the course for better use of America's largest natural resource.
- 24** Lone Mountain Processing Boosts Recovery
A new deslime column flotation circuit recovers an additional 20 tph.
- 28** Productivity Improvement for Longwall Development
Industry survey reveals coal operators thoughts about the use different techniques to keep development ahead of longwall production.

COAL IN THE NEWS

- 4** President Bush signs Energy Policy Act of 2005
- 5** Peabody Energy earnings more than double
- 8** Pennsylvania celebrates Foundation expansion project
- 10** Massey Reports 194% increase in income
- 12** Arch Coal reports strong performance despite rail problems
- 16** New mine to open near AEP plant

WORLD NEWS

- 5** China looks to Australia for technology and safety training
 South African union declares dispute
- 6** Greenpeace disrupts world's largest coal port
 Australians reopen Ivanhoe mine
- 12** Canada's Donkin mine to reopen
 Power plant in Romania switch from gas to coal

ENERGY BILL / 20**LONE MOUNTAIN / 24****NEWS / 4**

THIS ISSUE

This month U.S. President George W. Bush signs the Energy Bill into law. It will support coal-fired power plant technology, such as those used by AEP's 1,300-mw Rockport plant (cover) on the Ohio River. (Photo courtesy of AEP).

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Coal Age

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FEATURE ARTICLES

- 26 Demand Returns to the Illinois Basin
Tougher environmental policy now bode well for the region. The first of a two-part series that details developments in the Illinois Basin. Part 1 covers Illinois, in general, and Alliance Resource Partners in particular.
- 36 Minimizing Maintenance with Oil Conditioning Monitoring

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- 7 Strong coal prices lift Alpha's earnings
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- 14 MSHA robot newest mine safety tool
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- 12 Adobe Ventures in negotiations to acquire Latin American coal assets
India to hike annual coal output by 70%
Russians build new coal terminal

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OPERATING IDEAS / 36



THIS ISSUE

This month Coal Age reports on the rising demand of coal from the Illinois Basin. Cover: Alliance Resource Partner's Gibson County coal complex. Photographer: Lee Buchsbaum/LMB Photography.

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Manager of Metallurgical Coal Sales for
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by Bill Archer

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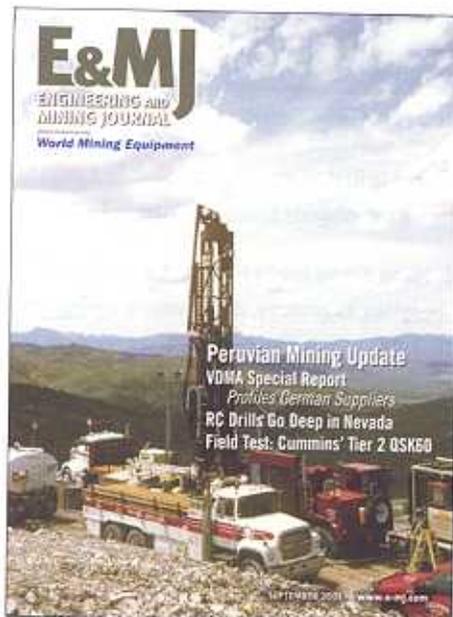
German Technology Special <i>Working with the German Mining Equipment Association within the German Engineering Federation (VDMA), E&MJ provides a special report that profiles some of the latest technology for mining and mineral processing</i>	VDMA 1-32
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An Atlas Copco RD10+ reverse circulation rig, owned by Eklund Drilling of Elko, Nevada, USA, sets up at a gold exploration drill site in the western U.S.

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GLOBAL PROJECTS

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- 28** Norwegian gas project sites massive equipment on sea bed, "platform" on land and places longest undersea pipeline to England.

► Feature

- 34** China drives to meet transportation growth with network of high-speed roadway projects.

Cover photo courtesy of Norsk Hydro; photo right courtesy of Heine Schelberg/Norsk Hydro



SPECIAL REPORT

► The Top 225 International Contractors and The Top 225 Global Contractors

- 40** International contractors get bigger as they diversify and expand roles to meet global infrastructure needs.



Atlanta terminal woes. Page 10

NEWS

► Business & Economics

- 10** Airports: Fired terminal designers sue Atlanta officials
- 12** Companies: Cash-rich Rudolph and Sletten sought buyer and found Perini
- 12** Schools: New Jersey chief to depart school construction agency
- 13** Unions: Proposed solidarity charter draws some BCTD opposition

- 13** Unions: Carpenter's McCarron expected to win reelection
- 16** Labor: Helmets to Hardhats gains direct entry for applicants
- 18** Associations: Marketers seek "C-Suite" presence

► Power & Industrial

- 14** Renewable Energy: Concentrating solar project would generate 500 MW

► Buildings

- 14** Contracts: Bovis Lend Lease to run Ground Zero demolition
- 19** Preservation: A reverent renovation for a modern landmark

► Transportation

- 17** Bridges: First section of Woodrow Wilson bascule rises over Potomac River



Potomac River bridge work. Page 17

► Environment

- 16** Dams: \$100-million agreement settles Milltown's fate in Montana

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NEWS

► **Natural Disasters**

- 10** Reeling in the aftermath of Hurricane Katrina's wallop, Gulf Coast residents must cope with losses that could soar past \$16 billion. Engineers and contractors are mobilizing to stem disaster and some speculate on the future of the region's flood defenses.

Cover image by Guy Lawrence for ENR; cover photo and right of floodwaters in New Orleans by AP/Wideworld



SPECIAL REPORT

► **The Health Care Cost Crisis**

- 22** Industry employers and workers struggle to cover medical care as costs bite hard into balance sheets and checkbooks.
- 23** Design firms prescription for cost relief: More employee consumerism and activism in new arenas.

SKANSKA

Take Heart.
 Back for healthier employees.
Why do you overeat?

Healthy contractors. Page 26

- 26** Despite a "macho" mentality, contractors push for healthier lifestyles and tout medical coverage as a key corporate benefit.
- 28** Construction unions find that collective bargaining gains are funding health care instead of wages.

NEWS

► **Environment**

- 15** **Clean Air:** Regional group plans end run to cut carbon emissions

► **Transportation**

- 16** **Security:** Cameras and sensors will patrol New York railways and bridges
- 17** **Tunnels:** Chicago airport link has touchy tunnel work ahead

► **Business & Economics**

- 14** **Base Closings:** Lots of construction ahead after panel trims list
- 15** **Ballot Issues:** California tackles industry initiatives



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SPECIAL NEWS REPORT

► Hurricane Aftermath

12 The Gulf Coast struggles to recover from the Aug. 29 storm that cut off power, wrecked infrastructure and killed and dislocated thousands of residents. Much cleanup and many questions still remain.

► Katrina's Wake

- 14 Power Restoration:** Utilities overcome devastation to turn on the lights
- 16 Levees:** Corps "unwatering" operation begins to make progress
- 20 Transportation:** Some repairs under way for Gulf Coast roads, ports and airports
- 23 Flood Control:** Comprehensive regional plan needed for reconstruction
- 26 Dewatering:** New Orleans pumping stations won't be dry for a month
- 27 Petroleum:** Battered Gulf Coast facilities are coming back quickly
- 29 Water System:** New Orleans' water system may be out for a year
- 30 Indoor Air Quality:** Flooded buildings are powerless against mold
- 31 Engineering Solutions:** Sturdy flood defenses shield U.K. and Netherlands

FEATURE

► Lower Manhattan Redevelopment

- 37** Seven World Trade Center is the first tower being rebuilt at Ground Zero. By erecting the steel frame ahead of its concrete core, it will serve as a model for construction of the planned 1,776-ft Freedom Tower.



Ground Zero progress.

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SPECIAL NEWS REPORT

▶ **Disaster Recovery**

- 13 Levees:** California flood defenses may be vulnerable
- 14 Water Quality:** New Orleans floodwaters become an environmental catastrophe
- 16 Contracts:** Relocation and cleanup spur new round of Katrina awards
- 18 Roads:** Work commences on stricken Gulf Coast bridges
- 19 Education Impact:** Displaced students relaunch academic careers elsewhere

NEWS

▶ **Business**

- 20 Unions:** Machinists make bid to join the building trades' group
- 20 Unions:** Mechanical crafts unite to protect turf

▶ **Transportation**

- 21 Bridges:** Culturally iconic link breaks the ice in North Dakota
- 23 Transit:** Seattle monorail finances altered

▶ **Cover Story:**

ENR

- 10** As floodwaters recede in sodden New Orleans, the damage to the region's flood defenses appears to be worse than previously believed. There has not yet been a definitive explanation of how the levees failed.

Cover photo and photo above by Michael Goodman for ENR

▶ **Power & Industrial**

- 24 Petroleum:** Expansion will bring reserve to a billion barrels of crude

FEATURE

▶ **Lower Manhattan Redevelopment**

- 28** Recently drafted by New York state to coordinate \$21 billion worth of investment in the redevelopment of lower Manhattan, Charles Maikish comes to the job with deep ties to the World Trade Center site.

FEATURE

▶ **Schools**

- 33** Fueled by aging infrastructure and growing student populations, the K-12 construction market is spurring a steady stream of work for contractors and design firms.

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SEPTEMBER/OCTOBER 2005

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The Geological Society of America Bulletin is a leading international journal for major scholarly research in all branches of the earth sciences. Published continuously since 1890.

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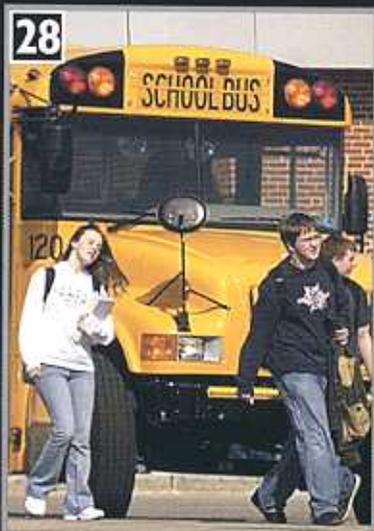
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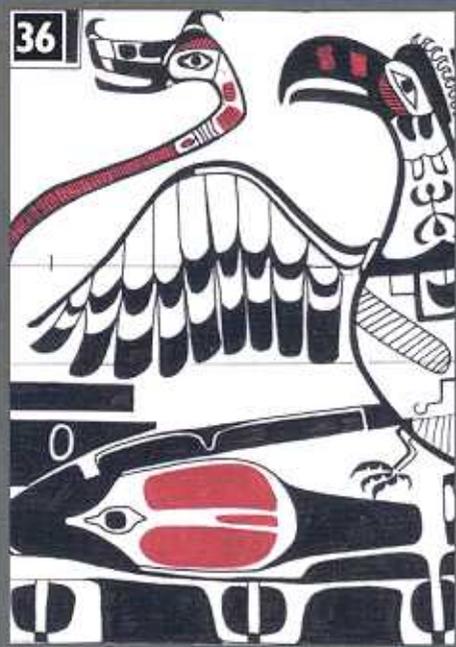
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The Geographic Project, co-sponsored by the National Geographic Society, IBM and the Waitt Family Foundation, is genetically sequencing DNA from thousands of people around the world to track individuals' migration out of Africa. The focus of the project is on indigenous people, such as those pictured here: Bastar "Turo" Turner, a descendant of Mongolian leader Genghis Khan who lives in San Francisco, Calif.; Julius Indayaya Hun/Jan/Janne, the Hadzabe chieftain in Tanzania; Phil Bluehouse Jr., a Navajo Indian from Arizona. Read the story on page 24. Photo by Mark Thiessen, National Geographic.

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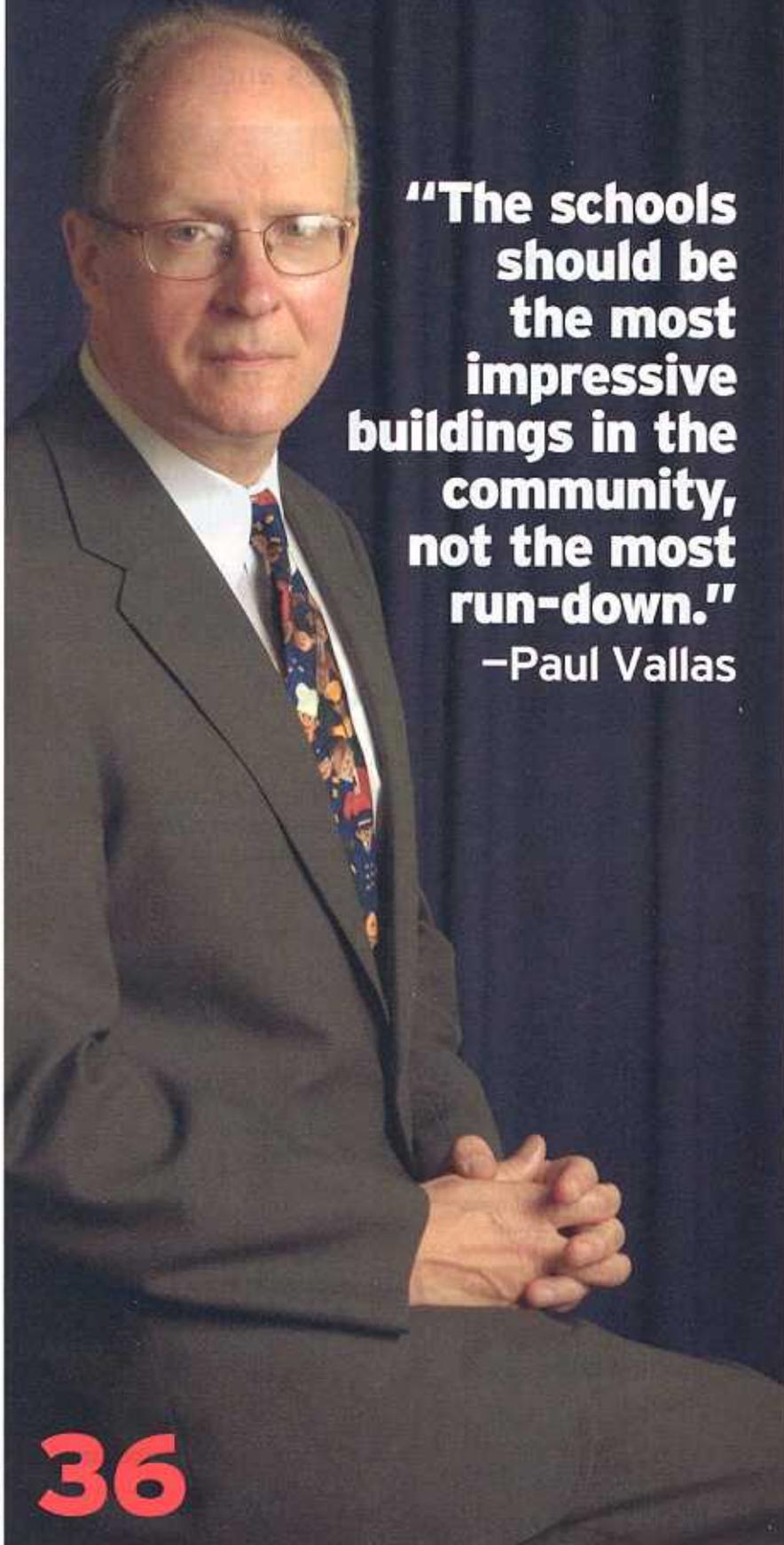
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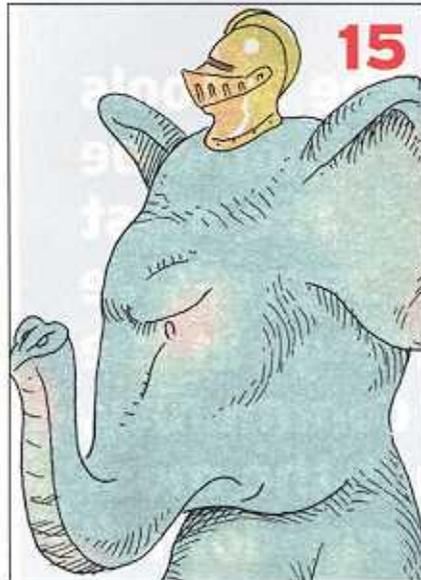
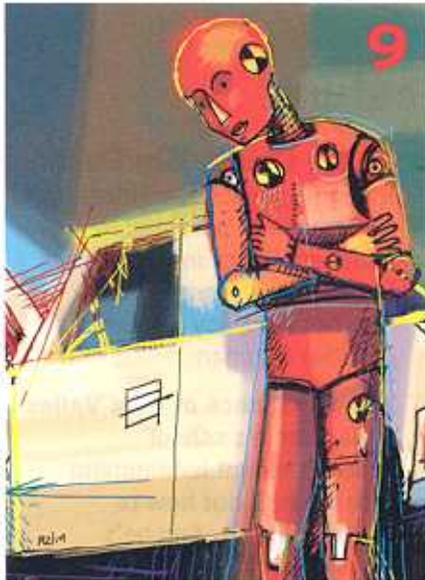
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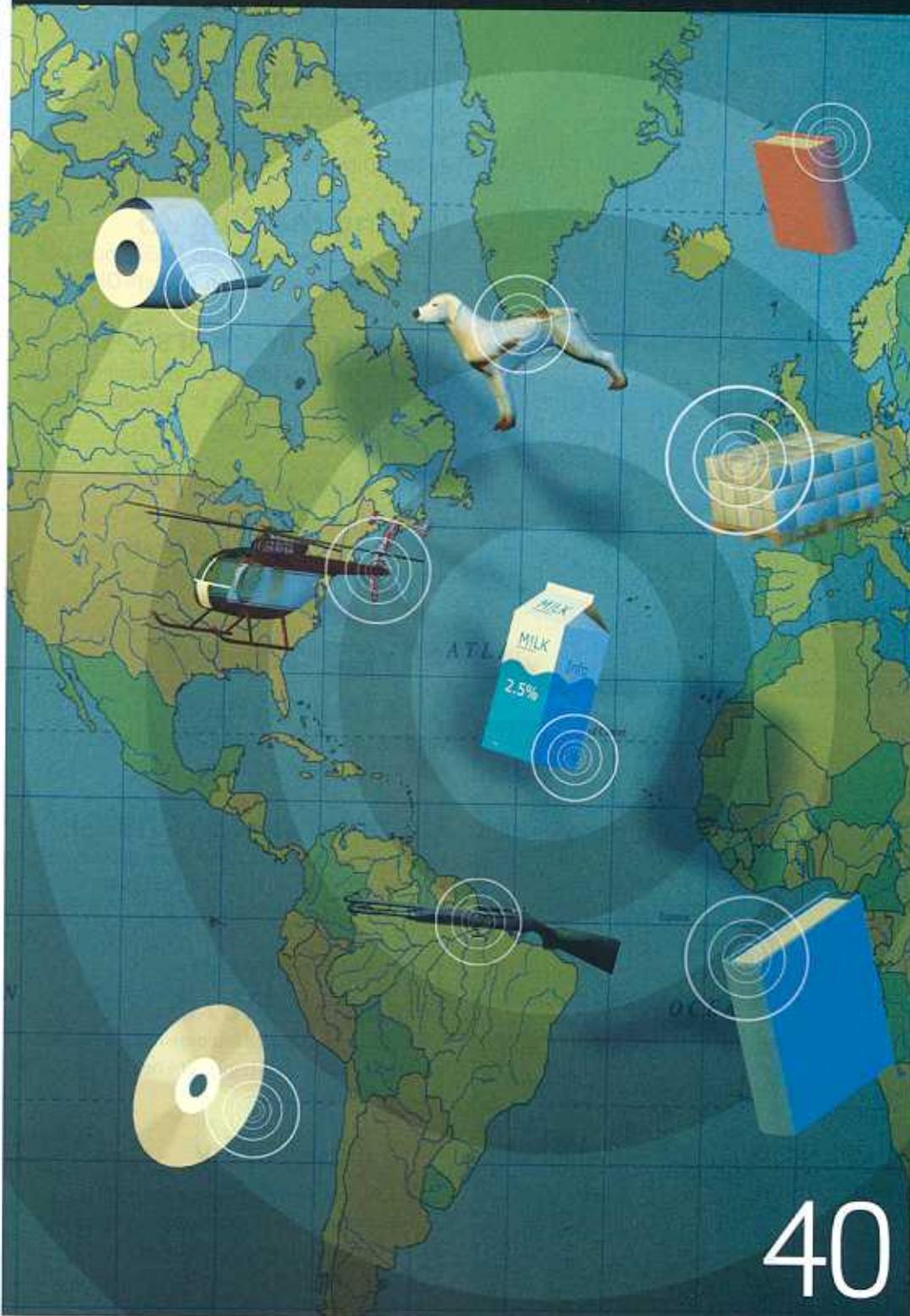
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A new, redesigned Governing.com debuts September 6, bringing a fresh look and much more:

- Expanded state and local government news from around the country
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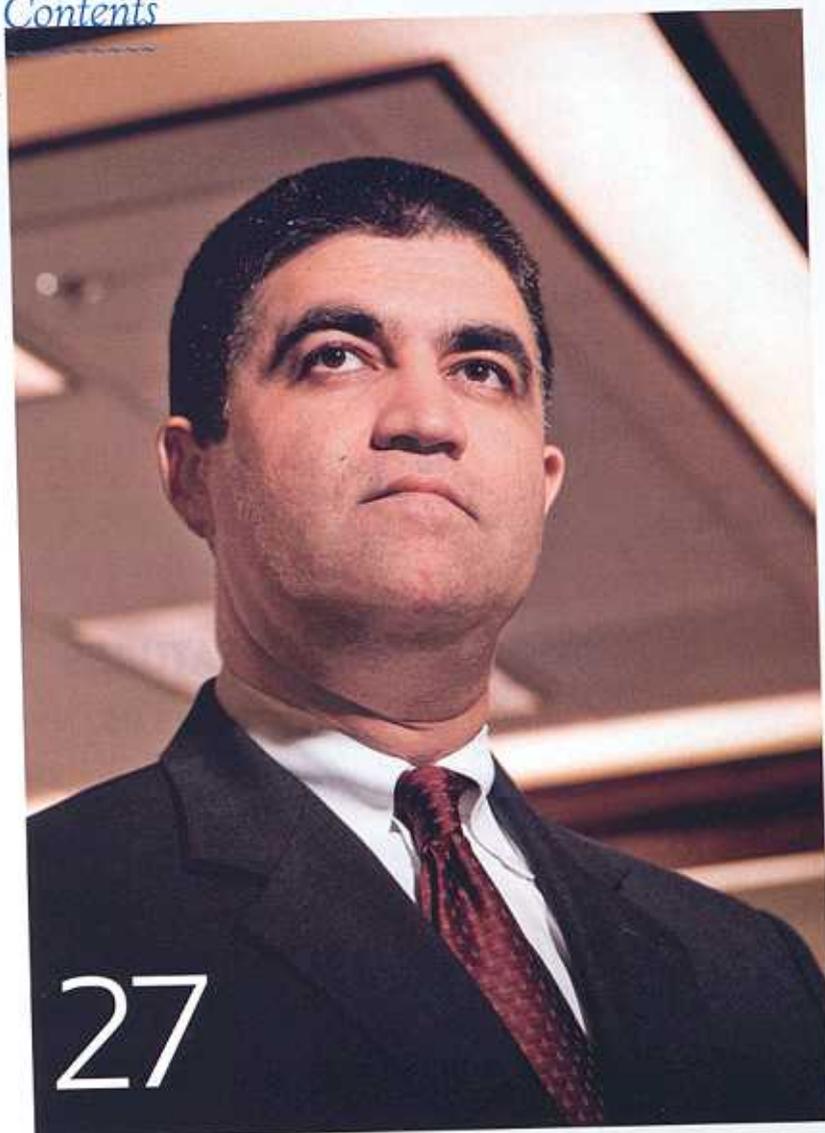
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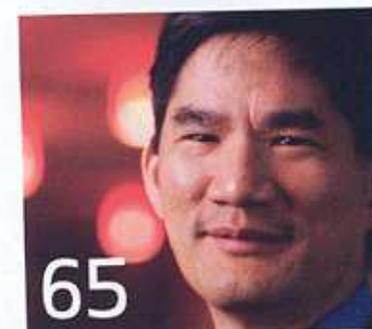
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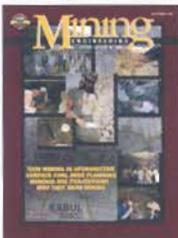
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MINING ENGINEERING

VOL. 57, NO. 9 SEPTEMBER 2005

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August 2005

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Phelps Dodge Mining Co.'s Sierrita unit mines an ore that contains both low-grade copper and low-grade molybdenum. Together, however, the two metals made the mine tremendously profitable in the recent quarter. In fact, it was by far the most profitable of the Phelps Dodge operations. Bagdad, with similar ore conditions, is not far behind. (Photo courtesy of Phelps Dodge.)

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An Interdisciplinary Approach to Soils Research

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