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THIS ISSUE

This month, Coal Age covers markets and coal trading in-depth. With domestic steam demand flat, more operators are pursuing export opportunities. On the cover, a bucketwheel reclaimers at West Shore Terminals in Vancouver, B.C. (Photo courtesy of Lee Buchsbaum)

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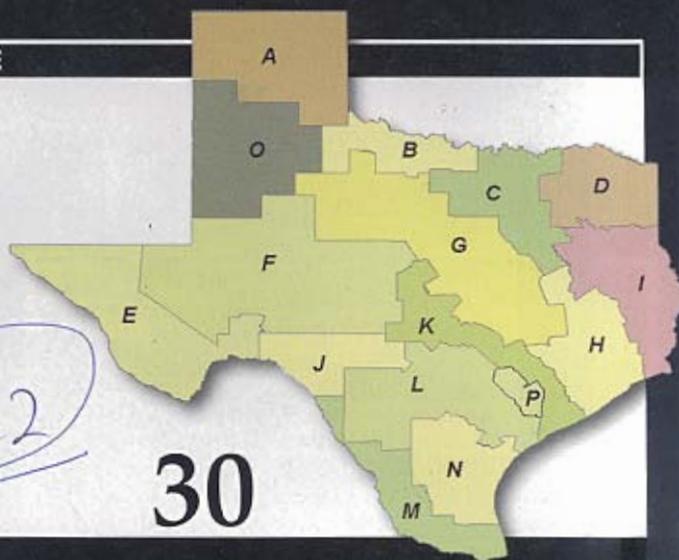
SEEING THE CHALLENGES AHEAD: IDENTIFYING STRATEGIES TO ASSURE WATER SUPPLIES AND ENERGY NEEDS ARE MET

National and regional energy-water policies are necessary to meet our growing energy needs and to ensure sustainable, affordable water supplies in the future. This requires figuring out where and how much water and energy will be needed and how to tie the two together. Novel research methods in Texas may serve as a road map for the way forward.

Scott Moorhead, Suzanne A. Pierce and Carey King

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John Perry

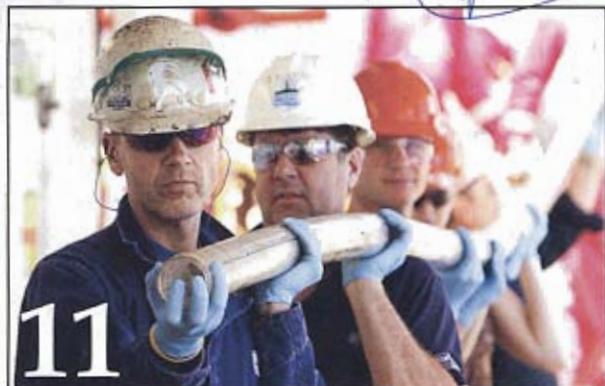


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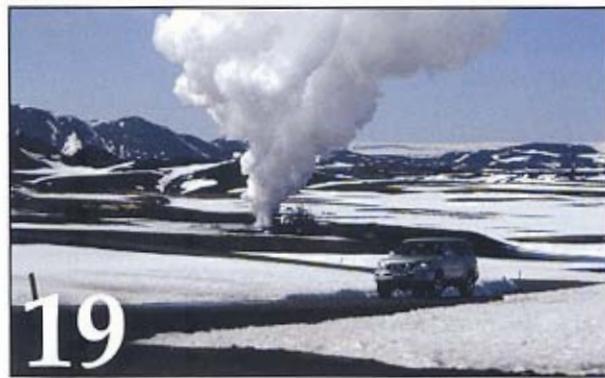
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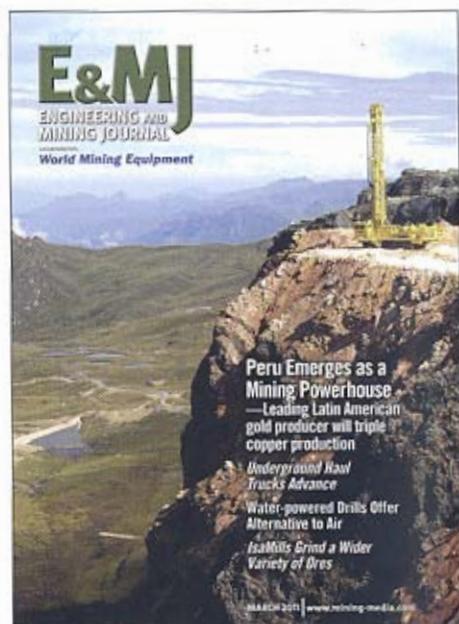
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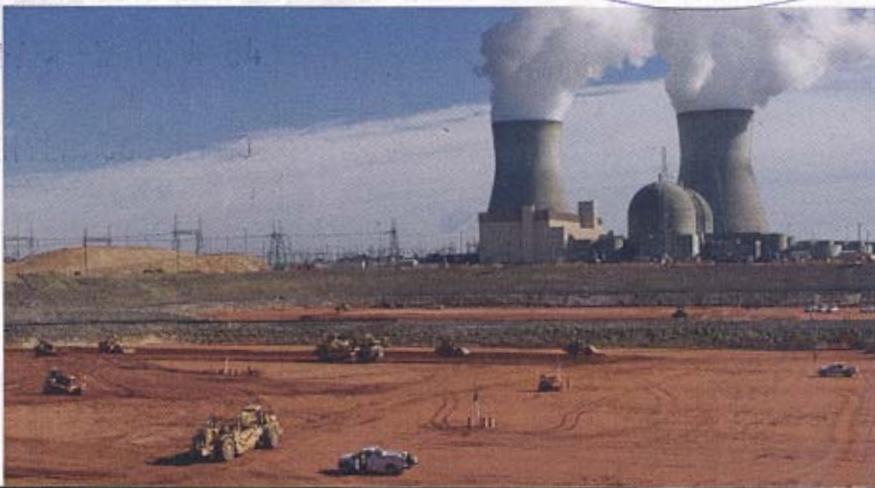


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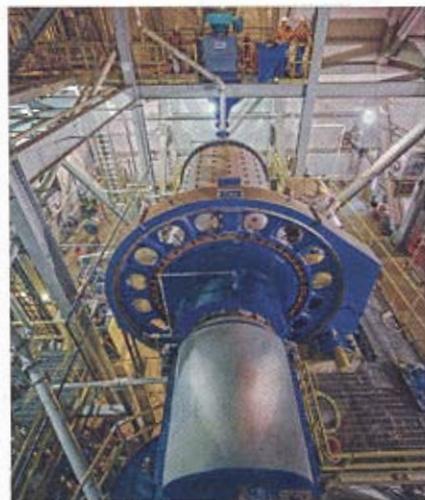
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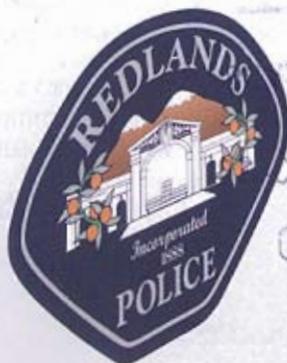
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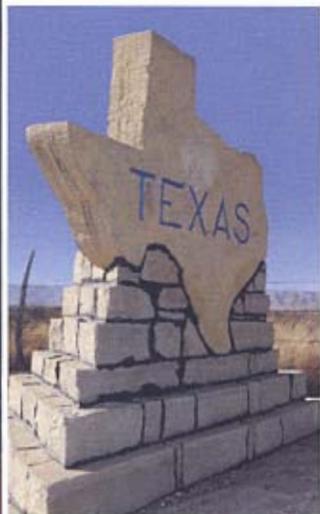
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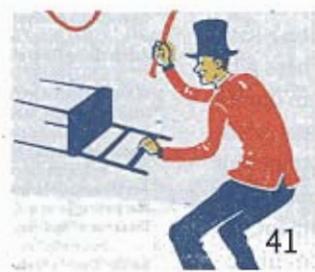


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Corrections

In the February issue, the article "Famous Feds" noted that James Abbott McNeill Whistler worked for the National Oceanic and Atmospheric Administration's Office of Coast Survey. His tenure at the agency was before it became part of NOAA.

In the March issue, the article "Wanted: Smart Soldiers" gave an incorrect answer to a sample aptitude test question. The correct answer is B-720.

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Special Issue

Applications of Remote Sensing and GIS for Monitoring of Coal Fires, Mine Subsidence, Environmental Impacts of Coal-mine Closure and Reclamation

edited by

Şebnem Düzgün^a, Claudia Künzer^b and C. Özgen Karacan^c^a*METU Ankara, Turkey*^b*DFD-DLR, Oberpfaffenhofen, Germany*^c*NIOSH, Pittsburgh, USA*

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EXPLOSIVES ENGINEERING

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The City of Atlanta chose tunneling as their main solution to their current CSO problem. Tunneling was chosen for several reasons, one of which is their successful history with tunnels. Initial planning called for three separate drop shafts and three separate vent shafts to be pulled back from the excavated tunnel with a large diameter raise bore machine. With time constraints and the raise bore machine already in high demand on other shafts, a more "traditional" drill and blast approach was taken on a few of the larger drop shafts. This decision proved to be not only cost effective, but also time-saving as the shafts were excavated simultaneously with the other raise bores.
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- 28 Peak Particle Velocity Versus Gravitational Acceleration as a Stability Criterion for Earth Retaining Walls Subjected to Production Blast Vibrations**
An overland conveyor was constructed at a surface coal mine to reduce the truck haul distance and make the operation more efficient. This article documents the erroneous specification of acceleration as a safety and stability criterion for mechanically stabilized earth retaining walls subjected to blasting vibrations. Use of a peak particle velocity specification allows a more economical blast design to be used closer to the wall without compromising the safety of the wall.

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On the Cover: Photo Contest Best in Show. In April 2010, an 800 Ton boulder started to detach from the cliff threatening to slide down and severely damage a major highway in the South of Israel. Tamar Advanced Quarrying was called in to carefully plan and implement a well-timed explosion in order to disconnect the boulder from the cliff and to dismantle it into very small pieces. The threat was successfully removed with minimal interruption to traffic and no damage to the highway. See story and more winners in the next issue of the Journal of Explosives Engineering.

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Land and Water

THE MAGAZINE OF NATURAL RESOURCE MANAGEMENT AND RESTORATION

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The finished Kishwaukee Valley Road over the north branch of the Kishwaukee River in McHenry County, Illinois. Measures to protect the Iowa Darter fish and the high quality of the stream were built into plans for the construction of a new two-span bridge. See story on page 15.



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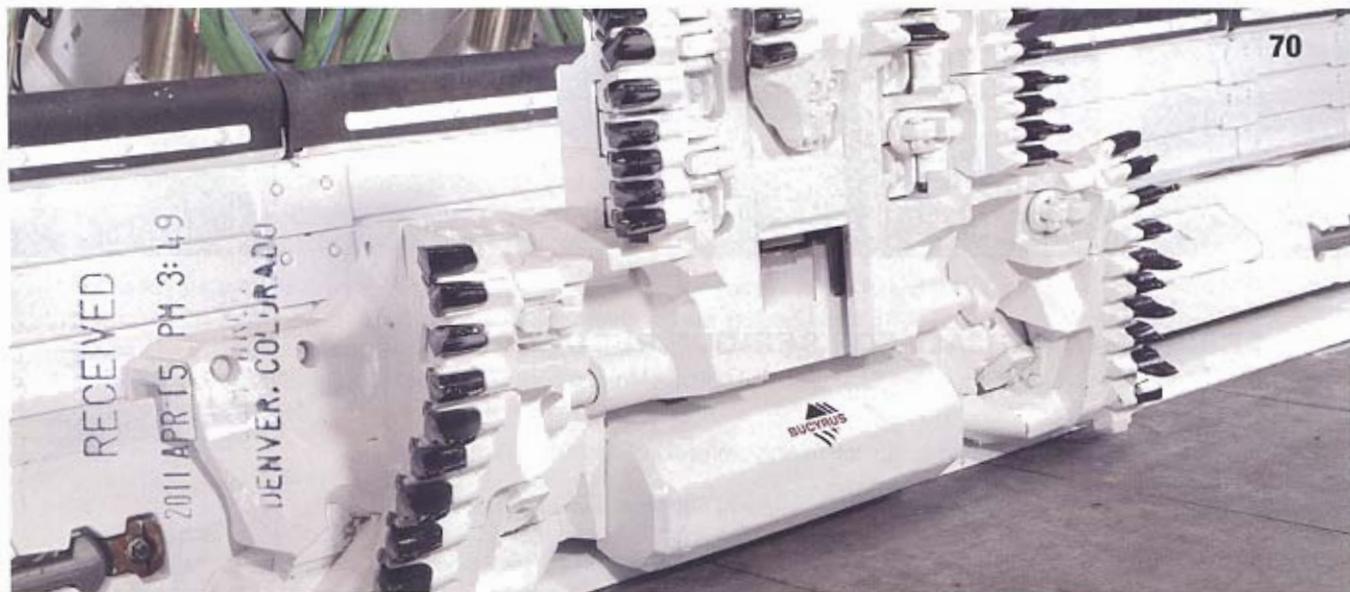
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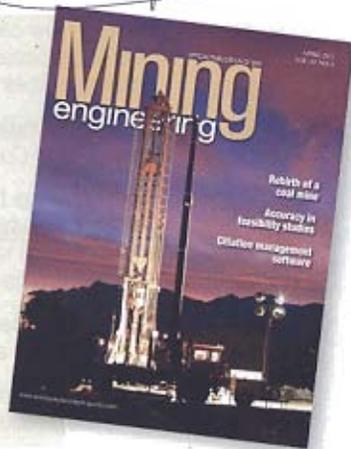
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The cover this month is a photo taken by Joseph Royer, winner of the 2010 SME Photo Contest. His photo shows a Boart Longyear rig drilling a commercial water well in Lamoille, NV. Also in this issue, Jack Pippenger describes how Thiess Pty. Ltd. kept the Meandu coal mine in Queensland, Australia from closing. Instead, Thiess drew up a new mine plan and extended the life of the mine by 25 years, page 40. In his Jackling Lecture, Richard Bullock takes on the accuracy of feasibility studies and why the industry, for accountability reasons, should take a hard look at how those studies are undertaken and what they actually tell potential investors, page 78.



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PAY DIRT

MAGAZINE

A Voice For Western Mining Since 1938

December 2010

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Corpus Christi-based Uranium Energy Corp.'s Palangana project in South Texas is the first ISR uranium mine to get into production in the United States in more than five years. It feeds uranium-bearing resin to the state-of-the-art Hobson processing facility (shown on cover) about 100 miles to the north. Hobson also will accommodate feed from other ISR projects that Uranium Energy is developing in South Texas, including Salvo and Goliad.

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Front Cover Photograph: Sagebrush steppe in central Nevada with the Mahogany Hills, Fish Creek Range, and Antelope Range in the background. Photo by Ben Rau.

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Front Cover: Storm rolling in across the plains of the Charles M. Russell National Wildlife Refuge, Montana, near Sand Creek Station. Photo by Angela M. Reid.

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An Interdisciplinary Approach to Soils Research

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