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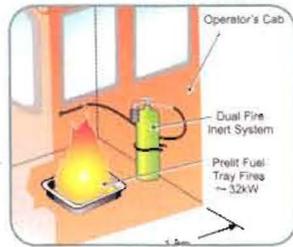
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THIS ISSUE

This month, Coal Age covers developments in Wyoming's Powder River Basin. On the cover, a haul truck loaded with coal heads for the truck dump at Western Fuel's Dry Fork mine. (Photo by Lee Buchsbaum, www.lmbphotography.com)

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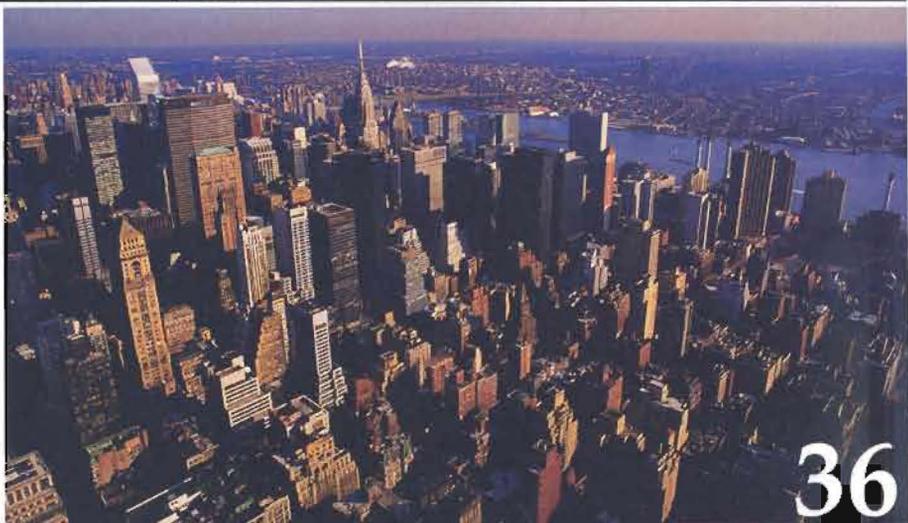
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FEATURE

NEW YORK'S DIRTY SECRET

America's largest oil spill is also one of its least publicized. This underground spill — located in Brooklyn, N.Y. on the bank of one of the country's most polluted waterways — has been around for a century. Oil companies have been pumping oil out of the ground to clean the spill up for more than 30 years, but it may take another 25 years to finish the job. Meanwhile, environmentalists, local residents and lawmakers are becoming increasingly impatient.

Cassandra Willyard



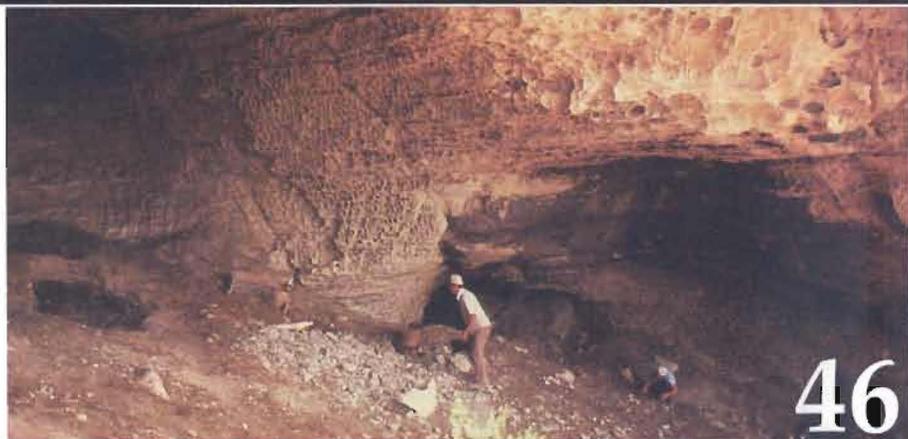
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FEATURE

IT'S A DIRTY JOB, BUT SOMEONE'S GOTTA DO IT

Paleontologists have long relied on fossilized bones to reconstruct the lives of everything from dinosaurs to ancient humans. But they have another tool that can tell them even more about how these creatures lived, including what the climate was like and what they ate: Fossilized feces, known as coprolites, can reveal a startling amount of information about animals that died thousands or even hundreds of thousands of years ago.

David B. Williams



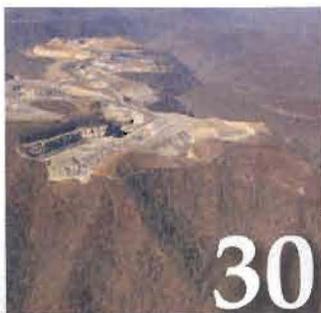
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TRENDS AND INNOVATIONS

WEST VIRGINIA COAL: DIRTY WATER, DIRTIER POLITICS: BUT WILL THERE BE A CLEANER FUTURE?

For 250 years, coal mining has ruled West Virginia, providing jobs and money for people, often to the detriment of the environment. Recently, some scandalous photos exposed the politics behind one company, and the Environmental Protection Agency and Congress have stepped in to demand that the industry cleans up its act.

Mary Caperton Morton



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EDUCATION AND OUTREACH

SCHOOLS GO GREEN

In recent years, elementary, middle and high schools across the United States have been taking steps to become more efficient, installing everything from solar panels, geo-exchange heating and cooling systems and wastewater systems to non-flushing toilets to reduce water and energy use and provide a healthier environment.

Nicole Branam



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Representation of oil spilling out into New York's Newtown Creek. Illustration by Nicolle Rager Fuller, Sayo-Art Science Illustration.

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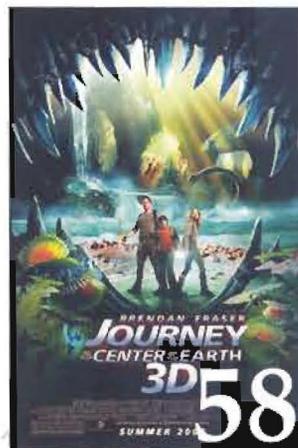


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- 76 **GEOLOGIC COLUMN**
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Rather than holding up a rock sample in a lecture hall and saying "this is granite," professors at the School of Mines in Alaska sought out the common experiences that their 1920s students held, discovering one universal interest. Thus, rock poker was born.
Lisa A. Rossbacher

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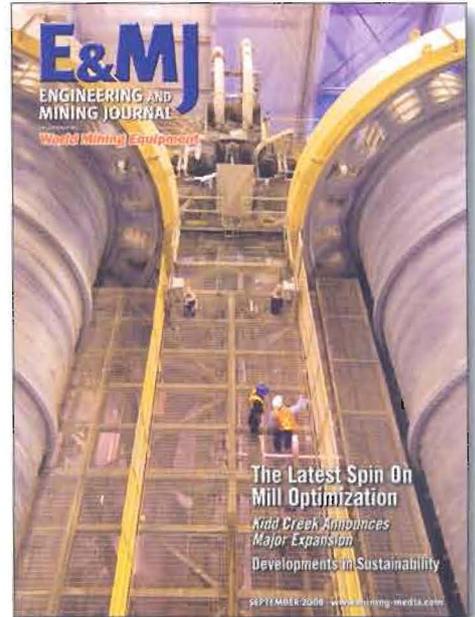
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This month E&MJ turns its attention to mill optimization programs. Today's grinding circuits can handle a lot, but if they are improperly engineered, it can affect everything downstream. (Photographer: David Tejada, see p. 129)

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Main cover photo courtesy of National Center for Construction Education & Research; Top right cover photo and photo above by AP/Wideworld

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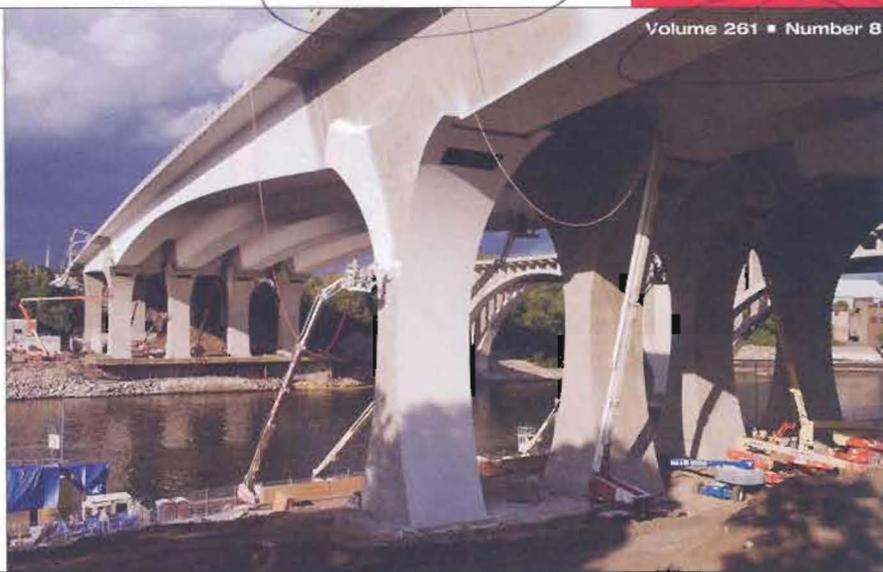
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26 Working under a relentless public spotlight and through a cold winter, a design-build team is wrapping up construction of the new Interstate 35W bridge in Minnesota.

Cover photo and photo right courtesy of Tim Davis



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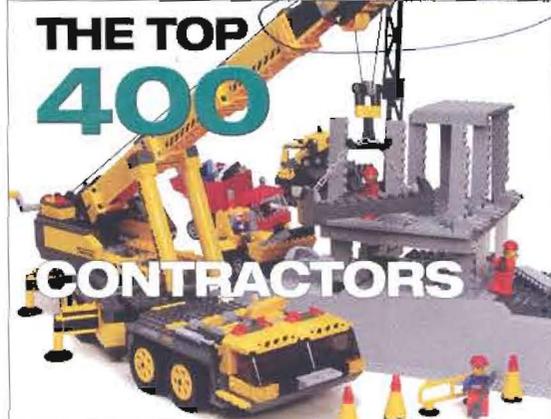
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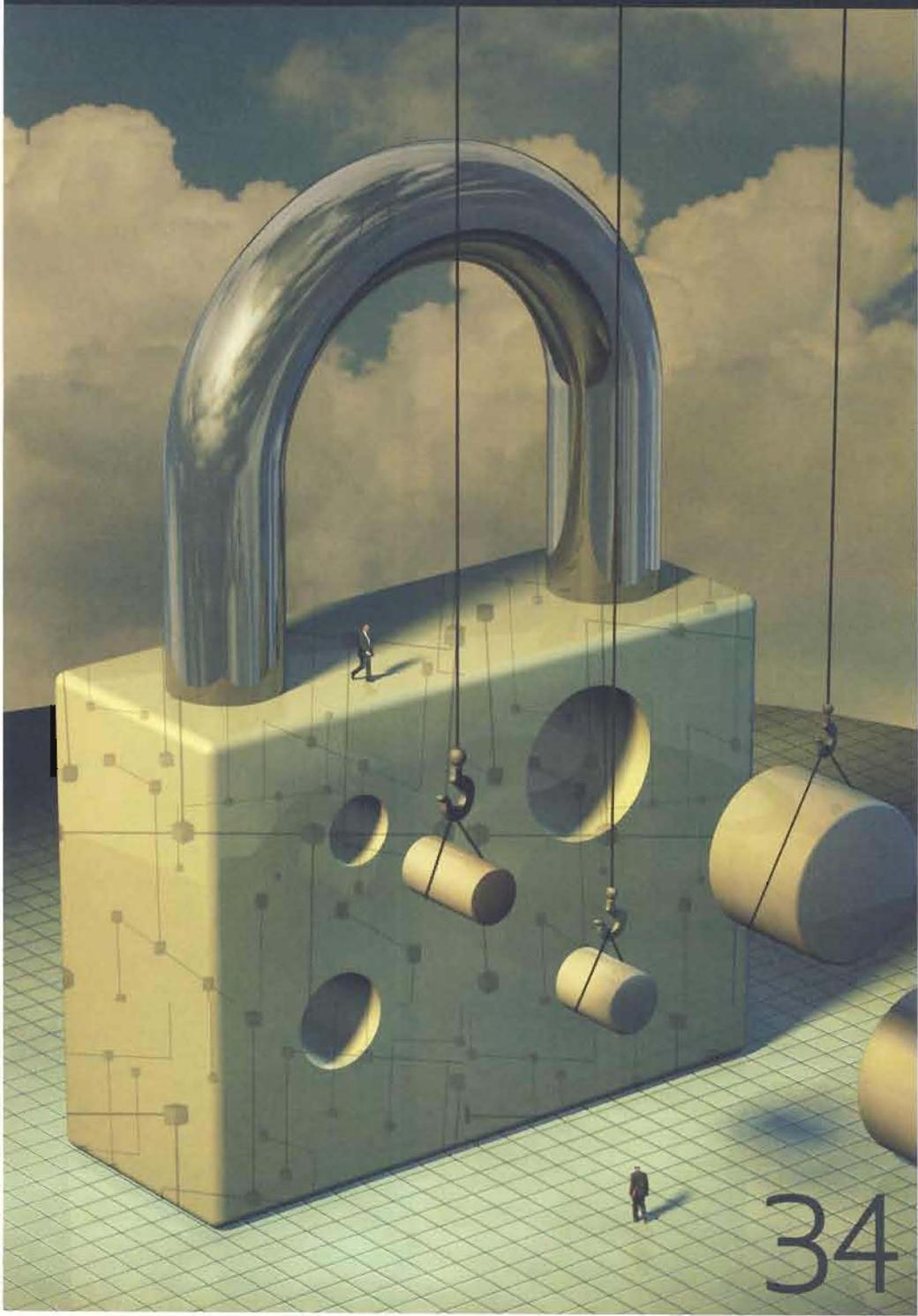
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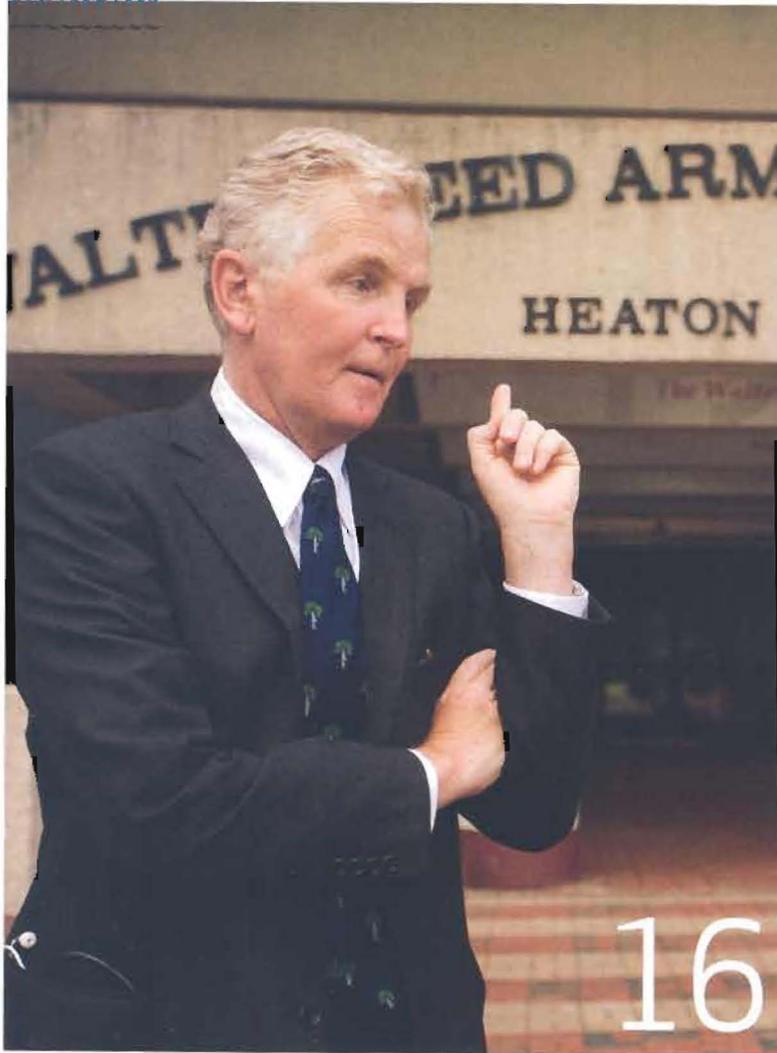
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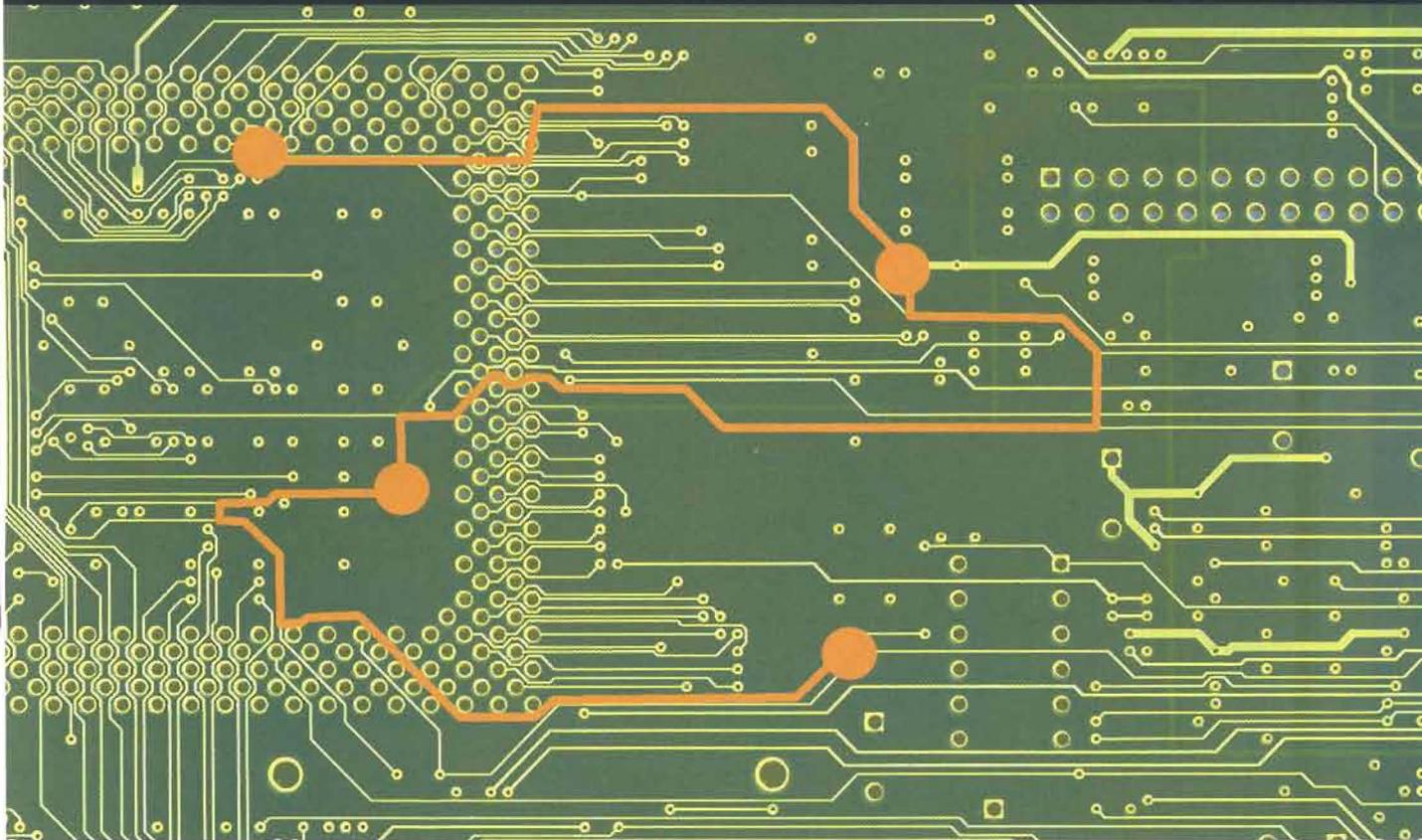
The feature "Building Capacity" in the Aug. 1 issue incorrectly stated that no federal building had yet achieved the highest rating, platinum, in the Leadership in Energy and Environmental Design certification program. The National Renewable Energy Laboratory in Golden, Colo., achieved the platinum rating in April 2007.

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- 1855-1861 Selection of Plants for Optimization of Vegetative Filter Strips Treating Runoff from Turfgrass by *Katy E. Smith, Raymond A. Putnam, Clifford Phaneuf, Cory R. Lanza, Orr P. Dhankher, and John M. Clark*
- 1862-1874 Water Quality Trends and Changing Agricultural Practices in a Midwest U.S. Watershed, 1994-2006 by *William H. Ronwick, Michael J. Vanni, Qianyi Zhang, and Jon Patton*
- 1875-1882 Farm Factors Associated with Reducing *Cryptosporidium* Loading in Storm Runoff from Dairies by *W.A. Miller, D.J. Lewis, M.D.G. Pereira, M. Lennox, P.A. Conrad, K.W. Tate, and E.R. Atwill*
- 1883-1893 Transport of Particulate Matter Fractions in Urban Source Area Pavement Surface Runoff by *John J. Sansalone and Jong-Yeop Kim*
- 1894-1908 Thirty-Year Trends in Suspended Sediment in Seven Lake Erie Tributaries by *R. Peter Richards, David B. Baker, John P. Crampton, Jack W. Kramer, D. Ellen Ewing, and Barbara J. Merryfield*

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- 1918-1928 Spatial Variability in 2-Methyl-4-chlorophenoxyacetic Acid Mineralization and Sorption in a Sandy Soil at Field Level by *I. Fredslund, E.P. Vinther, U.C. Bruch, L. Elgaard, P. Rosenberg, and C.S. Jacobsen*
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- 1959-1967 Regionalizing Potential for Microbial Bypass Flow through New Zealand Soils by *Malcolm McLeod, Jackie Aslabie, Janine Ryburn, and Alexandra McGill*
- 1968-1973 Co-digestion of Animal Slurry Can Increase Short-Term Nitrogen Recovery by Crops by *H.C. de Boer*
- 1974-1985 Landfill Cover Soil, Soil Solution, and Vegetation Responses to Municipal Landfill Leachate Applications by *Ned W. MacDonald, Richard R. Rediske, and Brian T. Scull, and David Wierzbicki*

- 1986-1992 Revisiting a Statistical Shortcoming when Fitting the Langmuir Model to Sorption Data by *Carl H. Bolster*

- 1993 Welcome to Shirley: A Memoir from an Atomic Town reviewed by *Elizabeth Gebhardt*

- 1994 Community-based Water Law and Water Resource Management Reform in Developing Countries reviewed by *Mabrouk A. El-Sharkawy*

- 1995 Emerging Markets for Ecosystem Services: A Case Study of the Panama Canal Watershed reviewed by *Guillermo Hernandez-Ramirez*

- 1996 Hydrodynamics and Water Quality reviewed by *Keith Beven*

- 1997 Biological Monitoring: Theory and Applications reviewed by *N.W. Lepp*

- 1998 Statistical Framework for Recreational Water Quality Criteria and Monitoring reviewed by *Dr. Ulrich Halekoh*

- 1999 Soil Carbon Management: Economic, Environmental, and Societal Benefits reviewed by *Curtis J. Dell*

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- S-1-S-7 **Environmental Impacts and Sustainability of Degraded Water Reuse** by Dennis L. Corwin and Scott A. Bradford
- S-8-S-24 **Short-Term Sustainability of Drainage Water Reuse: Spatio-Temporal Impacts on Soil Chemical Properties** by Dennis L. Corwin, Scott M. Lesch, James D. Oster, and Stephen R. Kafka
- S-25-S-35 **Drainage Water Reuse: Biological, Physical, and Technological Considerations for System Management** by Lynn M. Dudley, Alon Ben-Gal, and Naftali Lazarmitch
- S-36-S-42 **Soil Enzyme Activities of Long-Term Reclaimed Wastewater-Irrigated Soils** by Weiping Chen, Laosheng Wu, William T. Frankenberger, Jr., and Andrew C. Chang
- S-43-S-57 **Modeling Vadose Zone Processes during Land Application of Food-Processing Waste Water in California's Central Valley** by Gretchen R. Miller, Yoram Rubin, K. Ulrich Mayer, and Pascual H. Benito
- S-58-S-67 **Sustainability of Land Application of Class B Biosolids** by Ian L. Pepper, Hurray Zerzghi, John P. Brooks, and Charles P. Gerba
- S-68-S-77 **Geospatial Methods for Monitoring a Vegetative Treatment Area Receiving Beef Feedlot Runoff** by Roger A. Eigenberg, Scott M. Lesch, Bryan Woodbury, and John A. Nienaber
- S-78-S-85 **Environmental Occurrence and Shallow Ground Water Detection of the Antibiotic Monensin from Dairy Farms** by Naoko Watanabe, Thomas H. Hester, and Brian A. Bergamaschi
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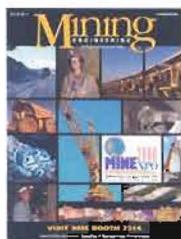
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