

NEW PUBLICATIONS

MINING UPDATE

NIOSH

1995-96

In September 1995, the U.S. Congress directed the closure of the U.S. Bureau of Mines (USBM). Mining health and safety research at the USBM Pittsburgh, PA, and Spokane, WA, Research Centers was assigned on an interim basis to the U.S. Department of Energy, then permanently assigned to the National Institute for Occupational Safety and Health (NIOSH) in October 1996. NIOSH is part of the Centers for Disease Control and Prevention within the U.S. Department of Health and Human Services.

This listing summarizes mining health and safety publications and articles published by the Pittsburgh and Spokane Research Centers during 1995-96 and how to order copies of them.

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In addition, the **Common Information Service System (CISS)** is a computer based information management and delivery system providing free online access and distribution of many of the mining health and safety research publications listed below. Visit our CISS site at <http://speedy.usbm.gov:8000>

REPORTS OF INVESTIGATIONS

Reports of Investigations (RI's) may be ordered from the National Technical Information Service (NTIS), 5285 Port Royal Rd., Springfield, VA 22161; phone (703) 487-4650; fax (703) 321-8547; e-mail: order@ntis.fedworld.gov. Please specify the NTIS stock number when ordering.

RI 9527. Effective Hazard Recognition Training Using a Latent-Image, Three-Dimensional Slide Simulation Exercise, by E.A. Barrett and K.M. Kowalski. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-170379.

RI 9530. Computer Modeling and Analysis of The Greens Creek Mine, Admiralty Island, AK, by M.J. Beus and T.J. Orr. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-176418.

RI 9600. Application of Field Measurements and Computer Modeling to Evaluate Deep Mine Shaft Stability in Northern Idaho, by M.J. Beus, T.J. Orr and J.K. Whyatt. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, 1996. NTIS stock number: PB96-140181.

RI 9596. Reducing Respirable Dust Levels During Bag Conveying and Stacking Using Bag and Belt Cleaner Device, by A.B. Cecala, R.J. Timko and A.E. Prokop. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB96-135470.

RI 9573. Transport of Total Tailings Paste Backfill: Results of Full-Scale Pipe Test Loop Pumping Tests, by C.C. Clark, J.D. Vickery and R.R. Backer. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB96-118898.

RI 9615. Dust Control Considerations for Deep-Cut Mining When Utilizing Exhaust Ventilation and a Scrubber, by J.F. Colinet and R.A. Jankowski. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1996. NTIS stock number: PB96-147798.

RI 9548. Dust Sources and Controls for Multiple-Machine Longwall Faces, by J.F. Colinet and E.R. Spencer. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-220141.



U.S. Department of Health and Human Services

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- RI 9572. A Comparison of Mines Fire Sensors**, by R.S. Conti and C.D. Litton. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB96-115233.
- RI 9626. A 20-Liter Furnace Test Method to Determine the Combustion Gas Toxicity of Conveyor Belts**, by M.I. DeRosa. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1996. NTIS stock number: PB96-202619.
- RI 9558. Optically Powered Remote Gas Monitor**, by T.H. Jr., Dubaniewicz and J.E. Chilton. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-236808.
- RI 9595. New Techniques for Mining Thin-Seam Mountaintop Coal Reserves**, by J.P. DuCarme, J.S. Jaspal and A.J. Kwitowski. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1996. NTIS stock number: PB96-147863.
- RI 9622. Comparative In-Mine Evaluation of Carbon Monoxide and Smoke Detectors**, by J.C. Edwards and G.F. Friel. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1996. NTIS stock number: PB96-165188.
- RI 9551. Development of Coal Combustion Sensitivity Test for Smoke Detectors**, by J.C. Edwards and G.S. Morrow. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-219648.
- RI 9586. Evaluation of Smoke Detectors for Mining Use**, by J.C. Edwards and G.S. Morrow. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB96-128566.
- RI 9624. Mine Fire Detection by Ultrasonic Ranging Systems**, by G.F. Friel and J.C. Edwards. Pittsburgh, PA: U.S. Department of Energy, 1996. NTIS stock number: PB96-188149.
- RI 9627. Evaluation of Techniques for Protecting Dust Sampling Equipment in Harsh Environments**, by G.V.R. Goodman and E.R. Spencer. Pittsburgh, PA: U.S. Department of Energy, 1996. NTIS stock number: PB96-210810.
- RI 9621. Performance Comparison of Second-Generation Oxygen Self-Rescuers**, by N. Kyriazi. Pittsburgh, PA: U.S. Department of Energy, 1996. NTIS stock number: PB96-188107.
- RI 9635. Self-Contained Self-Rescuer Field Evaluation Fifth-Phase Results**, by N. Kyriazi and J.P. Shubilla. Pittsburgh, PA: U.S. Department of Energy, 1996. NTIS stock number: PB97-124937.
- RI 9630. Moisture-Corrected Reflectance Rock Dust Meter**, by C.E. Lucci. Pittsburgh, PA: U.S. Department of Energy, 1996. NTIS stock number: PB96-215017.
- RI 9585. Gel Sealants for the Mitigation of Spontaneous Heatings in Coal Mines**, by Y. Miron. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB96-131966.
- RI 9625. Using Ground Penetrating Radar for Roof Hazard Detection in Underground Mines**, by G.M. Molinda, W.D. Monaghan, G.L. Mowrey and G. F. Persetic. Pittsburgh, PA: U.S. Department of Energy, 1996. NTIS stock number: PB96-188123.
- RI 9616. Assessment of Airborne Dust Generated from Small Truck-Mounted Rock Drills**, by J.A. Organiscak and S.J. Page. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1996. NTIS stock number: PB96-155098.
- RI 9613. Real-Time Monitoring of Field Measurements for Mine Design: Greens Creek Mine, Admiralty Island, Alaska**, by T.J. Orr and M. J. Bous. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, 1996. NTIS stock number: PB96-144183.
- RI 9534. A Case Study of Shield-Strata Interaction at a Southern Ohio Mine**, by D.C. Oyler. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-178901.
- RI 9531. Rock Mechanics Study of Shaft Stability and Pillar Mining, Homestake Mine, Lead, SD (in three parts): 1. Premining Geomechanical Modeling Using UTAH2**, by W.G. Pariseau, J.C. Johnson, M.M. McDonald and M.E. Poad. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-178927.
- RI 9576. Rock Mechanics Study of Shaft Stability and Pillar Mining, Homestake Mine, Lead, SD (in three parts): 2. Mine Measurements and Confirmation of Premining Results**, by W.G. Pariseau, J.C. Johnson, M.M. McDonald and M.E. Poad. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB96-107081.
- RI 9618. Rock Mechanics Study of Shaft Stability and Pillar Mining, Homestake Mine, Lead, SD (in three parts): 3. Geomechanical Monitoring and Modeling Using UTAH3**, by W.G. Pariseau, J.C. Johnson, M.M. McDonald and M.E. Poad. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, 1996. NTIS stock number: PB96-144217.
- RI 9570. Hazards of Conveyor Belt Fires**, by F.J. Porzak, C.D. Litton, K.E. Mura and C.P. Lazzara. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-264792.
- RI 9566. Influence of Environmental Factors on Spark Ignition Probability**, by J.S. Peterson. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-269800.

RI 9545. Teleoperation of a Compact Loader-Trammer, by T.M. Ruff. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-216305.

RI 9538. Performance of Automatic Sprinkler Systems for Extinguishing Incipient and Propagating Conveyor Belt Fires Under Ventilated Conditions, by A.C. Smith, R.W. Pro and C. P. Lazzara. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-200879.

RI 9623. Design and Demonstration of a Continuous Dust Control Parameter Monitoring System, by E.R. Spencer, P.D. Kovscek and K.G. Fields. Pittsburgh, PA: U.S. Department of Energy, 1996. NTIS stock number: PB96-188156.

RI 9636. Material Properties of Retested Specimens Composed of Tailings, Cement, and Blast-Furnace Slag, by D.R. Tesarik, J.B. Seymour and W.L. Lane. Spokane, WA: U.S. Department of Energy, 1996. NTIS stock number: PB97-133276.

RI 9565. Stability Analysis of a Backfilled Room-and-Pillar Mine, by D.R. Tesarik, J.B. Seymour, T.R. Yanske and R.W. McKibbin. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-251872.

RI 9553. Detection and Control of Spontaneous Heating in Coal Mine Pillars—A Case Study, R.J. Timko and R.L. Derick. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-236790.

RI 9568. Human Factors Analysis of Roof Bolting Hazards in Underground Coal Mines, by F.C. Turin et al. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-274411.

RI 9584. A Profile of Workers' Experience and Preparedness in Responding to Underground Mine Fires, by C. Vaught, B. Fotta, W.J. Wichagen, R.S. Conti and R.S. Powkes. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1996. NTIS stock number: PB96-147848.

RI 9547. Bending Fatigue Tests on Flattened Strand Wire Rope at High Working Loads, by R.C. Wang and D.E. Shapiro. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-216297.

RI 9632. Secondary Explosion Hazards During Blasting in Oil Shale and Sulfide Ore Mines, by E.S. Weiss, K.L. Cashdollar, M.J. Sapko and F.M. Bazala. Pittsburgh, PA: U.S. Department of Energy, 1996. NTIS stock number: PB97-127658.

RI 9614. Inflatable Devices for Use in Combating Underground Mine Fires, by E.S. Weiss, R.S. Conti, F.M.

Bazala and R.W. Pro. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1996. NTIS stock number: PB96-162367.

RI 9634. Evaluation of Polymer Construction Material and Water Trap Designs for Underground Coal Mine Seals, by E.S. Weiss, W.A. Slivensky, M.J. Schultz, C.R. Stephan and K.W. Jackson. Pittsburgh, PA: U.S. Department of Energy, 1996. NTIS stock number: PB96-123392.

RI 9532. In Situ Stress at the Lucky Friday Mine (in four parts): 1. Reanalysis of Overcore Measurements from 4250 Level, by J.K. Whyatt and M.J. Beus. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-179859.

RI 9567. In Situ Stress at the Lucky Friday Mine (in four parts): 3. Reanalysis of Overcore Measurements from the Star Mine, by J.K. Whyatt, M.J. Beus and M.K. Larson. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-271276.

RI 9560. In Situ Stress at the Lucky Friday Mine (in four parts): 2. Analysis of Overcore Measurements from 5300 Level, by J.K. Whyatt, F.M. Jenkins and M.K. Larson. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-251880.

RI 9619. Strength and Deformation Properties of Belt Strata, Coeur d'Alene Mining District, ID, by J.K. Whyatt, B.G. White and J.C. Johnson. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, 1996. NTIS stock number: PB96-159009.

RI 9582. In Situ Stress at the Lucky Friday Mine (in four parts): 4. Characterization of Mine in Situ Stress Field, by J.K. Whyatt, T.J. Williams and W. Blake. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB96-131685.

RI 9540. Operational Characteristics of Trailings Cable Splices, by M.R. Yenchek, K.C. Schuster and A.J. Hudson. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-209227.

INFORMATION CIRCULARS

Information Circular (IC's) may be ordered from the National Technical Information Service (NTIS), 5285 Port Royal Rd., Springfield, VA 22161; phone (703) 487-4650; fax (703) 321-8547; e-mail: order@ntis.fedworld.gov. Please specify the NTIS stock number when ordering.

IC 9418. Computer Graphics Simulations Comparing Reduced exposure mining equipment—Shuttle Cars Versus Continuous Haulage Systems, by D.H. Ambrose. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-170643.

IC 9440. Historical Summary of Coal Mine Explosions in the United States, 1981 to 1994, by H. Jr., Dobroski, C.R. Stephan and R.S. Conti. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1996. NTIS stock number: PB96-154687.

IC 9439. How to Control Air Contaminants During Tunnel Construction, by F.N. Kissell. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB96-147558.

IC 9434. Evaluation of Several Natural Gamma Radiation Systems—A Preliminary Study, by S.D. Maksimovic and G.L. Mowrey. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB96-128608.

IC 9441. Installation and Safety Practices for Cable Bolts in Underground Mines, by L.A. Martin, J.M. Girard and J.M. Goris. Spokane, WA: U.S. Department of the Interior, Bureau of Mines, 1996. NTIS stock number: PB96-140165.

IC 9422. Hazard Recognition in Mining: A Psychological Perspective, by C.W. Perdue, K.M. Kowalski and E.A. Barrett. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-220844.

IC 9423. Comparison of Small Mines and Small Businesses: Health and Safety Barriers and Intervention Strategies, by L.L. Rethi and K.L. Burns. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-181376.

SPECIAL PUBLICATIONS

SP 01-95. Proceedings: Mechanics and Mitigation of Violent Failure in Coal and Hard-Rock Mines, by H. Maleki, P.F. Wopat, R.C. Repsher and R.J. Tuchman, eds. U.S. Department of the Interior, Bureau of Mines, 1995. NTIS stock number: PB95-211967. May be ordered from the National Technical Information Service (NTIS), 5285 Port Royal Rd., Springfield, VA 22161; phone (703) 487-4650; fax (703) 321-8547.

SP 08-95. U.S. Bureau of Mines. Lake Lynn Laboratory (brochure). Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. Free copy available from Beth L. Gilmore, NIOSH Pittsburgh Research Center, phone (412) 892-6554, e-mail: bug5@cdc.gov

SP 07-95. This is Mining... U.S. Bureau of Mines. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995. Free copy available from Production and Distribution, NIOSH Pittsburgh Research Center, phone (412) 892-4338.

TECHNOLOGY NEWS

To order back issues of Technology News, contact Production and Distribution, NIOSH Pittsburgh Research Center, phone (412) 892-4338.

TN 447. Dust Collector Discharge Shroud Reduces Dust Exposure to Drill Operators at Surface Coal Mines. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995.

TN 448. Improving the Performance of Longwall Gob Gas Ventsholes. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995.

TN 452. LAYOUT: A Bump Hazard Assessment Model. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995.

TN 453. Navigation and Control of Continuous Mining Systems for Coal Mining. Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1996.

TN 445. Updated Analysis of Longwall Pillar Stability (ALPS) Computer Program Incorporates New Coal Mine Roof Rating (CMRR). Pittsburgh, PA: U.S. Department of the Interior, Bureau of Mines, 1995.

MINING HEALTH AND SAFETY UPDATE

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U.S. Department of Energy | 1996|. Mining health and safety update, *March issue* (focus on ground control).

U.S. Department of Energy | 1996|. Mining health and safety update, *August issue* (focus on human factors).

OUTSIDE PUBLICATIONS

This category includes articles and papers published in peer-reviewed/referee journals, conference proceedings, non-technical journals or magazines, etc. Copies may be obtained from the journal or organization listed or from your local technical library.

Comparing Mining Techniques and Equipment Using Computer Graphics Simulation, by D.H. Ambrose. In: Ozdemir L., Hanna K., eds. Proceedings of the Third International Symposium on Mine Mechanization and Automation. Vol. 1, Golden, CO: Colorado School of Mines, 1995, pp. 6-1 to 6-12.

Computers in Geology, Geometry, Planning, Training, Communications: Mine Mapping, Modeling, and Visualization Systems, by D. Anderson. 1996, *Engineering and Mining J* 197(7):34-35.

Renewed Interest in Prop Supports as a Replacement for Wood Cribs, by T.M. Barczak and D.F. Gearhart. In: Peng, S., ed. *Proceedings of the 14th International Conference on Ground Control in Mining*. Morgantown, WV: West Virginia University, 1995, pp. 149-158.

Shield Evaluation and Performance Testing at the USBM's Strategic Structures Testing Laboratory, by T.M. Barczak and D.F. Gearhart. In: *Proceedings of Longwall USA*. Pittsburgh, PA, 1996, pp. 189-205.

Innovative Secondary Support Technologies for Western Mines, by T.M. Barczak and G.M. Molinda. In: Ozdemir L., Hanna K., Haramy K.Y., Peng S., eds. *Proceedings of the 15th International Conference on Ground Control in Mining*. Golden, CO, 1996, Colorado School of Mines.

Practical Solutions to Offset the Deficiencies and Price of Mine Timber, by T.M. Barczak and J. W. Wilson. In: Daemen, J.J.K., Schultz, R.A. eds. *Proceedings of the 35th U.S. Symposium on Rock Mechanics*. 1995, Lake Tahoe, NV.

Innovative Secondary Support Systems for Gate Roads, by T.M. Barczak, J.C. Zelanko and G.M. Molinda. In: *Proceedings of Longwall USA*. Pittsburgh, PA, 1996, pp. 21-43.

Independent Contractor Trends in the United States Mining Industry, by E.A. Barrett, B. Fotta and I.L. Reith. In: *Proceedings of Minesafe International 1996*. Perth, Western Australia, Australia, 1996, pp. 357-362.

Elements from Comprehensive Safety Programs in General Industry Could Benefit Independent Contractors Working in the Mining Industry—Part I, by E.A. Barrett, I.L. Reith and B. Fotta. 1996, *Holmes Safety Association Bulletin Mar*:1-6.

Elements from Comprehensive Safety Programs in General Industry Could Benefit Independent Contractors Working in the Mining Industry—Part II, by E.A. Barrett, I.L. Reith and B. Fotta. 1996, *Holmes Safety Association Bulletin Apr*:1-6.

Occupational Noise in Coal Mining - A Continuing Problem by R.C. Bartholomae. In: *Proceedings of the 13th Annual International Pittsburgh Coal Conference*. Pittsburgh, PA, 1996, pp. 959-964.

Longwall Mine Noise and Recommendations to Reduce Worker Noise Exposure, by R.C. Bartholomae and J.A.

Burks. In: *Proceedings of Noise-Con 96*. 1996, Seattle, WA: pp. 949-954.

Occupational Noise Exposures in Underground Longwall Coal Mines, by R.C. Bartholomae and J.A. Burks. In: *Proceedings of Inter-Noise '95*. 1995, Newport Beach, CA, pp. 833-836.

Extended Cut Mining and Worker Safety in Underground Coal Mines, by E.R. Bauer, L.J. Steiner and C.A. Hamrick. 1995, *Soc Min Eng preprint* 95-60.

A PC-Based Monitoring System for Mine Hoisting, by M.J. Beus, F.T., Jr., Duda and T.J. Orr. In: Mitri H.S., ed. *Proceedings of the Third Canadian Conference on Computer Applications in the Mineral Industry*. Montreal, Quebec, Canada: McGill University, 1995, pp. 646-653.

Mine Shaft Conveyance Load-Monitoring System, by M.J. Beus and W.G. McCoy. In: *Proceedings of the 1995 IEEE Industry Applications Society 30th Annual Meeting*. Vol. 3, 1995, Orlando, FL, pp. 2048-2053.

Design and Hazard Assessment of Mine Ore Passes, by M.J. Beus, B.M. Stewart and S. Iverson. In: Ozdemir L., Hanna K., Haramy K.Y., Peng S., eds. *Proceedings of the 15th International Conference on Ground Control in Mining*. Golden, CO, Colorado School of Mines, 1996, pp. 297-309.

Appalachian Coal: An Overview, by S.K. Bhatt. 1995, *Mining Engineering* 47(12):1089-1090.

Human Factors Considerations in Another Hazardous Industry: Mining, by G.R. Bockosh and R.H. Peters. In: *Proceedings of the International Workshop on Human Factors in Offshore Operations*. 1996, New Orleans, LA.

Improved Visibility for Operating Large Haulage Equipment, by C.M.K. Boldt. 1996, *Holmes Safety Association Bulletin May-June*:4-7.

Remote Reset for Continuous Miners Used in Extended Cuts, by A.L. Brautigam and A.J. Kwitowski. 1995, *Holmes Safety Association Bulletin May-June*:4-7.

Longwall Dust Control Potentially Enhanced by Surface Borehole Water Infusion, by A.A. Campoli, F.E. McCall, G.L. Finfinger and M.D. Zuber. In: Wala A.M., ed. *Proceedings of the Seventh U.S. Mine Ventilation Symposium*. Lexington, KY: University of Kentucky, 1995, pp. 147-152.

Longwall Dust Control Potentially Enhanced by Surface Borehole Water Infusion, by A.A. Campoli, F.E. McCall, G.L. Finfinger and M.D. Zuber. 1996, *Mining Engineering* 48(7):56-60.

Potential for Improving Longwall Dust Control by Surface Borehole Water Infusion, by A.A. Campoli, F.E. McCall, G.L. Finfinger and M.D. Zuber. 1995, Soc Min Eng preprint 95-139.

State-of-the-Art Room-and-Pillar Retreat Mining in the Kittanning Coalbed, by A.A. Campoli, D. Rebuck, T.P. Mucho and G.M. Molinda. 1996, Mining Engineering 48(4):30-35.

United States Bureau of Mines Health and Safety Research, by A.A. Campoli and R.J. Tuchman. In: Proceedings of the Asia-Pacific Workshop on Coal Mining Technology in Tokyo '95. Tokyo, Japan: Japan Technical Cooperation Center for Coal Resources Development (JATCC), 1995, pp. 20-27.

Status of a Tapered Element, Oscillating Microbalance-Based Continuous Respirable Coal Mine Dust Monitor, by B.K. Cantrell, S.W. Stein, H. Patashnick and D. Hassel. 1996, Appl Occupational and Environmental Hyg 11(7):624-629.

Diesel Exhaust Aerosol, Review of Measurement Technology, by B.K. Cantrell and W.F., Jr., Watts. In: The Canadian Adhoc Committee Proceedings of the November 6&7, 1996, Plenary Conference in Toronto, Ontario. Diesel Emissions Exposure Reduction in Mines. Toronto, Ontario, Canada: Canada Centre for Mineral and Energy Technology (CANMET), 1996, pp. 7.1-7.9.

Diesel Exhaust Aerosol, Review of Occupational Exposure, by B.K. Cantrell and W.F., Jr., Watts. 1996, Soc Min Eng preprint 96-126.

Continuous Respirable Mine Dust Monitor Development, by B.K. Cantrell, K.L. Williams, S.W. Stein, D. Hassel and H. Patashnick. In: Bockosh G.R., Langton J., Karmis M., eds. Proceedings of the 27th Annual Institute on Mining Health, Safety and Research. Blacksburg, VA: Virginia Polytechnic Institute and State University, 1996, pp. 91-102.

Physical vs. Psychophysical Measurement of Hearing Protector Attenuation—a.k.a. MIRE vs. REAT, by J.G. Casali, D.W. Mauney and J.A. Burks. Sound and Vibration, Materials Reference, 1995, July:20-27.

Coal Dust Explosibility, by K.L. Cashdollar. 1996, J of Loss Prevention in the Process Industries 9(1):65-76.

Methods to Lower Dust Exposures at Mineral Processing Operations, by A.B. Cecala, J.H. Daniel and E.D. Thimons. 1996, Appl Occupational and Environmental Hyg 11(7):854-859.

Reducing Respirable Dust Concentrations at Mineral-Processing Facilities Using Total Mill Ventilation System, by A.B. Cecala, E.D. Thimons and G.W. Klinowski. 1995, Mining Engineering 47(6):575-576.

Analysis of Retreat Mining Pillar Stability, by F.E. Chase, C. Mark and A.A. Campoli. In: Proceedings of the First International Mine Development, Planning, and Operations Conference. 1995, Pittsburgh, PA, pp. 234-251.

Analysis of Retreat Mining Stability, by F.E. Chase, C. Mark and A.A. Campoli. 1995, Soc Min Eng preprint 95-237.

Practical Aspects of Mobile Roof Support Usage, by F.E. Chase, A. McComas, C. Mark, T.M. Barczak and C.D. Goble. In: Ozdemir L., Hanna K., Haramy K.Y., Peng S., eds. Proceedings of the 15th International Conference on Ground Control in Mining. 1996, Golden, CO, Colorado School of Mines.

Design Considerations for Multiple-Seam Longwall Mining, by G.J. Chekan. In: Proceedings of the First International Mine Development, Planning, and Operations Conference. 1995, Pittsburgh, PA.

An Electromagnetic Spatial/Spectral Sensor for Geological Measurements, by R.L. Chufu. In: Proceedings of the Sixth International Conference on Ground Penetrating Radar. Sendai, Japan: Tohoku University, 1996, pp. 545-547.

Developing a Rugged and Portable Data Acquisition System for the Field, by G.P. Cole and J.S. Peterson. 1996, Sensors 13(2):33-36.

Inflatable Partitions for High-Expansion Foam Generators, by R.S. Conti. 1995, Mining Engineering 47(6):561-566.

Gob Gas Venthole Methane Drainage: Mine Safety and Global Climate Change Implications [Abstract], by W.P. Diamond. Tenth V.E. McKelvey Forum on Mineral and Energy Resources. 1995, Washington, D.C.

The Influence of Gob Gas Venthole Location on Methane Drainage: A Case Study in the Lower Kittanning Coalbed, PA, by W.P. Diamond. In: Wala A.M., ed. Proceedings of the Seventh U.S. Mine Ventilation Symposium. Lexington, KY: University of Kentucky, 1995, pp. 365-370.

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