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## **Journal Publications**

Author(s)	Date	Article
Eberhardt, E., D. Stead, B. Stimpson, R. Read	1998	Identifying crack initiation and propagation thresholds in brittle rock. Can. Geotech. J., 35(2): 222-233
Read, R.S., N.A. Chandler, and E.J. Dzik	1998	In situ strength criteria for tunnel design in highly-stressed rock masses Int. J. Rock Mech. & Min. Sci., 35(3): 261-278
Maxwell, S.C., R.P. Young, and R.S. Read	1998	A microvelocity logging tool to assess the excavation damaged zone.  Int. J. Rock Mech. & Min. Sci., 35(2):235-247
Eberhardt, E., D. Stead, B. Stimpson, and R.S. Read	1997	Changes in acoustic event properties with progressive fracture damage.  Int. J. Rock Mech. & Min. Sci., 34:(3/4), Paper No. 071B
Martin, C.D., R.S. Read, and J.B. Martino	1997	Observations of brittle failure around a circular test tunnel. Int. J. Rock Mech. & Min. Sci., 34(7): 1065-1073
Martin, C. Derek, Neil A. Chandler, and Rodney S. Read	1996	The role of convergence measurements in characterizing a rock mass. Can. Geotech. J., 33: 363-370
Martino, Jason B., and Rodney S. Read	1996	An overview of AECL's Heated Failure Tests. ISRM Newsjournal, 4(1): 24-31

Read, R.S., and C.D. Martin	1991	The Underground Research Laboratory Mine-by Experiment
		- A research perspective on tunnel design.
		Canadian Tunnelling, 7:75-88

## **Conference Publications**

Author(s)	Date	Article
Read, R.S. and J.B. Martino	2002	To arch or not to arch - the role of tunnel design in controlling excavation damage development.  In Proc. of the EDZ Workshop, NARMS-TAC 2002, July 6, 2002, Toronto, Ontario, Canada
Chandler, N.A., J.B. Martino, and R.S. Read	2002	The EDZ exists - So what? In Proc. of the EDZ Workshop, NARMS-TAC 2002, July 6, 2002, Toronto, Ontario, Canada
Isherwood, A., K.W. Savigny, A. Samchek and R.S. Read	2002	Deformation analysis of a pipeline river crossing.  Proc. IPC 2002: International Pipeline Conference, Sept 29  - Oct 3, 2002, Calgary, Alberta, Canada
Chandler, N.A., R.S. Read, D. Potyondy, R.P. Young, and J. Hazzard	2002	Computing brittle rock fracture and excavation stability using the Particle Flow Code. In Proc. 2nd Canadian Specialty Conference on Computer Applications in Geotechnique, April 28-30, 2002. Winnipeg, Manitoba, Canada
McLellan, P.J., C.D. Hawkes, and R.S. Read	2000	Sand production and control in horizontal wells for gas- storage reservoirs. In Proc. 4th International Conference and Exhibition on Horizontal Well Technology, Nov. 6-8, Calgary, Alberta, Canada
McLellan, P.J., R.S. Read, and K. Gillen	2000	Assessing caprock integrity for steam assisted gravity drainage projects in heavy oil reservoirs.  In Proc. 4th International Conference and Exhibition on Horizontal Well Technology, Nov. 6-8, Calgary, Alberta, Canada
Chandler, N.A., R. Read, P. Cundall, D. Potyondy, E. Detournay, R.P. Young, and J.S.O. Lau	2000	An integrated approach to excavation design - a project within Canada's used fuel disposal program.  In Proc. 4th North American Rock Mechanics Symposium, Seattle, Washington, USA pp. 1271-1278

Read, R.S., and N.A. Chandler	2000	Linkage between performance assessment, repository design and site characterization - a Canadian perspective.  In Proc. 2nd International Workshop on Geomechanics of Nuclear Waste Repositories, July 2000, Seattle, Washington, USA
Read, R.S., K.W. Savigny, F. Oboni, D.M. Cruden, and W. Langenberg	2000	Geotechnical hazard assessment of the south flank of Frank Slide. In Proc. GeoCanada 2000, Calgary, Alberta, Canada
Read, R.S., and N.A. Chandler	1999	Excavation damage and stability studies at the URL - rock mechanics considerations for nuclear fuel waste disposal in Canada.  In Proc. 37th US Rock Mech. Symp., Vail, CO: Balkema: Rotterdam, pp. 861-868
Chandler, N.A,. and R.S. Read	1998	The long-term behaviour of excavations in granite - In situ evidence from Canada's URL and implications for waste retrieval. In Proc. International Workshop on Reversibility, Paris, France, ANDRA
Leite, Maria Helena, Robert Corthèsy, Denis E. Gill, and Rodney Read	1997	Some aspects of a stress calculation model for deep measurements using the modified doorstopper cell. In Proc. Int. Symp. on Rock Stresses, Kumamoto, Japan: Balkema:Rotterdam, pp. 65-70
Read, R. S., and N. A. Chandler	1997	Minimizing excavation damage through tunnel design in adverse stress conditions.  In Proc. 23rd General Assembly - Int. Tunnel. Assoc., World Tunnel Congress `97, Vienna. Balkema: Rotterdam, pp. 23-28
Read, R. S	1996	Characterizing excavation damage in highly-stressed granite at AECL's Underground Research Laboratory. In Proc. Int. Conf. on Deep Geological Disposal of Radioactive Waste, EDZ Workshop, Winnipeg, Manitoba, Canada pp. 35-46
Martin, C. D., E. J. Dzik, and R. S. Read	1996	Designing an effective excavation damaged zone cut-off in high stress environments. In Proc. Int. Conf. on Deep Geological Disposal of Radioactive Waste, EDZ Workshop, Winnipeg, pp. 155-164
Read, R.S.	1996	Rock mechanics research at AECL's Underground Research Laboratory - An overview. In Prog. Symp. on Contributions to Geology by the Canadian Nuclear Fuel Waste Management Program, Winnipeg, Manitoba, Canada p. A-78

Read, R. S., and J. B. Martino	1996	Effect of thermal stresses on progressive rock failure at AECL's Underground Research Laboratory. In Proc. Int. Conf. on Deep Geological Disposal of Radioactive Waste, Winnipeg, pp. 7-43 - 7-53
Read, Rodney S., and Jason B. Martino	1996	In situ thermal testing at AECL's Underground Research Laboratory. In M. Aubertin, F. Hassani and H. Mitri, editors. Proc. 2nd North American Rock Mech. Symp., Montreal: Balkema: Rotterdam, pp. 1487-1494
Martin, C. Derek, and Rodney S. Read	1996	AECL's Mine-by Experiment: A test tunnel in brittle rock. In M. Aubertin, F. Hassani, and H. Mitri, editors. Proc. 2nd North American Rock Mech. Symp., Montreal: Balkema: Rotterdam, pp. 13-24
Chandler, Neil A., Rodney S. Read, and C. Derek Martin	1996	In situ stress measurements for nuclear fuel waste repository design. In M. Aubertin, F. Hassani and H. Mitri, editors.  Proc. 2nd North American Rock Mech. Symp., Montreal: Balkema:Rotterdam, pp. 929-936
Chandler, Neil A., Rodney S. Read, and Alan W. L. Wan	1996	Implications of the results of URL experiments on the design of repository seals in granite. In Proc. Int. Conf. on Deep Geological Disposal of Radioactive Waste, Winnipeg, Manitoba, Canada. pp. 7-1 - 7-10
Hayles, J.G., M.H. Serzu, G.S. Lodha, and R.S. Read	1996	Cross-hole seismic tomography for the Mine-by Experiment. In Proc. Soc. Expl. Geophysicists Int. Exposition, Denver, Vol. 1, pp. 904-907
Lodha, G.S., J.G. Hayles, G.W. Kuzyk, and R.S. Read	1996	Review of geophysical techniques used for understanding rock mass damage with examples from controlled experiments at the Underground Research Laboratory, Pinawa, Manitoba, Canada.  Presented at FRAGBLAST `96 Conference, Montreal, Quebec, Canada
Read, Rodney S., C. Derek Martin, and Edward J. Dzik	1995	Asymmetric borehole breakouts at the URL. In J. Daemen and R. Schultz, editors. Proc. 35th U.S. Rock Mech. Symp., Lake Tahoe: Balkema: Rotterdam, pp. 879-884
Martin, C.D., R.S. Read, and E.J. Dzik	1995	Near-face cracking and strength around underground openings. In H. P. Rossmanith, editor. Proc. 2nd Int. Conf. on Mechanics of Jointed and Faulted Rock, Vienna: Balkema: Rotterdam, pp. 747-752
Martin, C.D., N.A. Chandler,	1994	The role of convergence measurements in characterizing a

and R.S. Read		rock mass. In Proc. 47th Can. Geotech. Conf., Halifax, Nova Scotia, Canada pp. 408-417
Read, R.S., and C.D. Martin	1992	Monitoring the excavation-induced response of granite. In J. R. Tillerson and W. R. Wawersik, editors. Proc. 33rd U.S. Symp. on Rock Mech., Santa Fe: Balkema: Rotterdam, pp. 201-210
Martin, C.D., and R.S. Read	1992	The in situ strength of massive granite around excavations. In P. K. Kaiser and D. McCreath, editors. Proc. 16th Can. Rock Mech. Conf., Sudbury, pp. 1-10
Thompson, P.M., B.H. Kjartanson, and R.S. Read	1992	Design and construction of two major experiments at the URL. In Proc. 1992 International High-Level Radioactive Waste Management Conference, Las Vegas, Nevada, USA, Vol. 1, pp. 1082-1089
Onagi, D.P., R.S. Read, and G.W. Kuzyk	1991	AECL's Mine-by Experiment - from concept to construction. In Proc. SME Conference, Denver, Colorado, USA
Read, R.S., and C.D. Martin	1990	The Underground Research Laboratory Mine-by Experiment - A research perspective on tunnel design. In Proc. 8th Canadian Tunnelling Conf., Vancouver, British Columbia, Canada. BiTech: Vancouver, British Columbia, Canada pp. 213-226
Martin, C.D., R.S. Read, and P.A. Lang	1990	Seven years of in situ stress measurements at the URL - An overview. In W. A. Hustrulid and G. A. Johnson, editors. Proc. 31st U.S. Symp. Rock Mech., Golden, CO: Balkema: Rotterdam, pp. 15-26
Martin, C.D., R.S. Read, and N.A. Chandler	1990	Does scale influence in situ stress measurements? - Some findings at the Underground Research Laboratory. In A. Pinto da Cunha, editor Proc. 1st Int. Workshop on Scale Effects in Rock Masses, Loen, Norway, Balkema: Rotterdam, pp. 307-316

## **AECL and Other Publications**

Author(s)	Date	Article
Read, R.S. and N.A. Chandler	2002	Development and integration of tools for engineering design of repository sealing systems (ENDRES) Project status - March 2002. UFDP Report 06819-REP-01300-10051-R00
Read, R.S. and N.A. Chandler	2002	An approach to excavation design for a nuclear fuel waste repository - the Thermal-Mechanical Stability Study final report.  UFDP Report 06819-REP-01200-10086-R00
Martino, J.B., N.A. Chandler, R.S. Read and C. Baker	2002	Response of the Tunnel Sealing Experiment concrete bulkhead to pressurization. Ontario Power Generation Report No. 06819-REP-01200-10085-R00
Read, R.S. and N.A. Chandler	2001	Engineering design of repository sealing systems (ENDRES) project plan. Ontario Power Generation Technical Memorandum 06819(UF)-03782.04-T10
Read, R.S., N.A. Chandler, J.B. Martino, R.P. Young, P.Cundall, D. Potyondy, J. Lau, B. Gorski, E. Detournay, and Y. Ates	2001	The Thermal-Mechanical Stability Study: excavation design for a nuclear waste repository.  Ontario Power Generation Report (in press)
Chandler, N.A., and R.S. Read	2000	Thermal-Mechanical Stability Studies Project Status - March 2000. UFDP Report 06819-REP-01200-10030-R00
Read, R.S	1999	Engineering gap analysis for the Used Fuel Disposal Program - Geotechnical engineering tools and capabilities. Ontario Power Generation Report 06819-REP-01200-10010- R00
Chandler, N.A., and R.S. Read	1999	Thermal-Mechanical Stability Studies Project Status - 1999 March. UFDP Report 06819-REP-01200-10001-R00
Martino, J.B., P.M. Thompson, N.A. Chandler, and R.S. Read	1998	The in situ stress program at AECL's Underground Research Laboratory - 15 years of research (1982-1997). UFDP Report 06819-REP-01200-0053-R00
Read, R.S., J.B. Martino, N.A. Chandler, and E.J. Dzik	1998	Excavation stability study - analysis and interpretation of results. UFDP Report 06819-REP-01200-0028 R00

Read, R.S., J.B. Martino, N.A. Chandler, E.J. Dzik, S. Oliver, S. Falls and R.P. Young	1998	Analysis and interpretation of AECL's Heated failure Tests. UFDP Report 06819-REP-01200-0070-R00
Read, R.S.	1997	Progress report on development and integration of acoustic emission/microseismic (AE/MS) technology and numerical modelling. UFDP Report 06819-REP-01200-0042 R00
Read, R.S.	1997	Effect of rock mass quality on selection of a waste emplacement option. UFDP Report 06819-REP-01240-0003 R00
Thompson, P.M., J.B. Martino, N.A. Chandler, and R.S. Read.	1997	Summary of the URL In Situ Stress Program. UFDP Report 06819-REP-01200-0053 R00
Chan, T., M. Kolar, P.A. O'Connor, N.W. Scheier, and F.W. Stanchell with contributions by C.C. Davison, L.H. Frost, B.W. Nakka, N.A. Chandler, R.S. Read, J.D. Garroni, C.I. Kitson, D.M. Leneveu, L.H. Johnson and R. Zach	1997	Finite-Element Sensitivity Analysis of Effects of an Excavation Damage Zone on 129I Transport from a Used CANDU Fuel Waste Disposal Repository. UFDP Report 06819-REP-01200-0022 R00
Read, R.S.	1996	Tunnel Sealing Experiment - Rock engineering design report. AECL Report TSX-05
Chandler, N.A., D.A. Dixon, M.N. Gray and R.S. Read	1996	The Tunnel Sealing Experiment conceptual design report. AECL Report TSX-01
Dzik, E.J., and R.S. Read	1997	Scoping analysis of bulkhead keys for the Tunnel Sealing Experiment. AECL Report TSX-06
Read, R.S., and C.D. Martin	1996	Technical summary of AECL's Mine-by Experiment - Phase 1: Excavation response. Report AECL-11311, COG-95-171, Atomic Energy of Canada Limited
Read, R.S., and N.A. Chandler	1996	AECL's Excavation Stability Study - summary of observations. Report AECL-11582, COG-96-193, Atomic Energy of Canada Limited
Baumgartner, P., D.M. Bilinsky, Y. Ates, R.S. Read, J.L. Crosthwaite and D.A. Dixon	1996	The disposal of Canada's nuclear fuel waste - a study of in-room emplacement of used CANDU fuel in copper containers in permeable plutonic rock - Volume 2: Engineering.  Report AECL-11494-2, COG-95-552-2, Atomic Energy of Canada Limited
Read, R.S.	1994	Interpreting excavation-induced displacements around a tunnel in highly stressed granite.

		PhD thesis, Department of Civil and Geological Engineering, University of Manitoba, Winnipeg, MB
Martino, J.B., and R.S. Read	1996	Mine-by Experiment Phase III - Heated Failure Tests: Technical progress report and summary of Stage 4. Technical Report TR-737, COG-96-032, Atomic Energy of Canada Limited.
Martino, J.B., and R.S. Read	1996	Mine-by Experiment Phase III - Heated Failure Tests: Technical progress report and summary of Stage 3. Technical Report TR-686, COG-95-202, Atomic Energy of Canada Limited.
Martino, J.B., and R.S. Read	1995	Mine-by Experiment Phase III - Heated Failure Tests: Technical progress report and summary of Stage 2. Technical Report TR-675, COG-95-009, Atomic Energy of Canada Limited.
Martino, J.B., R.S. Read, and S.G. Keith	1994	Mine-by Experiment data summary report: Part 9 - Observations. Technical Report COG-93-347, Atomic Energy of Canada Limited.
Read, R.S., J.B. Martino, G.R. Karklin, E. Jacobs, and G. Hiltz	1994	Mine-by Experiment data summary: Part 1 - Survey results. Technical Report RC-1076, COG-93-290, Atomic Energy of Canada Limited.
Read, R.S., J.B. Martino, and J.H. Mitchell	1994	Mine-by Experiment data summary: Part 2 - Triaxial strain cell results. Technical Report RC-1077, COG-93-353, Atomic Energy of Canada Limited
Martino, J.B., and R.S. Read	1994	Mine-by Experiment Phase III Heated Failure Tests: Technical progress report and summary of Stage 1. Technical Report TR-652, COG-94-478, Atomic Energy of Canada Limited.
Martino, J.B., R.S. Read, and D. Collins	1993	Mine-by Experiment data summary report: Part 6 - Acoustic emission/microseismic results. Technical Report TR-597, COG-93-185, Atomic Energy of Canada Limited.
Martino, J.B., R.S. Read, and J.H. Mitchell	1993	Mine-by Experiment data summary report: Part 5 - Thermistor results. Technical Report RC-1079, COG-93-233, Atomic Energy of Canada Limited.
Read, R.S., and C.D. Martin	1993	Mine-by Experiment plan, Underground Research Laboratory - Addendum 1: Mine-by Experiment Heated Failure Tests. Quality Assurance Document DE010.086, Atomic Energy of Canada Limited.
Read, R.S., J.B. Martino, J.H. Mitchell, and M.H. Spinney	1994	Mine-by Experiment data summary: Part 3 - Extensometer results.

Read, R.S., J.B. Martino, and J.H. Mitchell	1993	Mine-by Experiment data summary: Part 4 - Convergence results. Technical Report TR-595, COG-93-177, Atomic Energy of Canada Limited.
Read, R.S.	1991	Mine-by Experiment - prediction of excavation-induced rock mass response. Technical Memorandum URL-EXP-022-M048, Atomic Energy of Canada Limited
Read, R.S. and C.D. Martin	1991	Mine-by Experiment final design report. Report AECL-10430, Atomic Energy of Canada Limited.
Read, R.S.	1990	Methodology for the acquisition, analysis and presentation of geological data from the Underground Research Laboratory subsurface drilling program, Volume I and II. Technical Record TR?484, Atomic Energy of Canada Limited.
Read, R.S.	1990	Residual strain, scale effects and time-dependent behaviour at the 240-m level of the Underground Research Laboratory. Report AECL-10038, Atomic Energy of Canada Limited.
Everitt, R.A., and R.S. Read	1990	Geology of the 240 Level of the Underground Research Laboratory, Volumes I and II. Technical Record TR-491, Atomic Energy of Canada Limited.
Woodcock, D.R., and R.S. Read	1990	Geological data summary for boreholes drilled for the 324-m instrument array at the Underground Research Laboratory. Technical Record TR-488, Atomic Energy of Canada Limited.
Woodcock, D.R., R.S. Read, and A. Knight	1990	Geological data summary for overcore boreholes drilled from the 300-m level of the Underground Research Laboratory 1988 May 25 to 1988 July 25. Technical Record TR-485, Atomic Energy of Canada Limited.
Read, R.S., and C.D. Martin	1990	Mine-by Experiment preliminary design report. Technical Memorandum URL-EXP-022-M044, Atomic Energy of Canada Limited.
Read, R.S.	1990	Geological data summary for boreholes drilled for the 384-m instrument array at the Underground Research Laboratory. Technical Record TR-483, Atomic Energy of Canada Limited.
Read, R.S.	1989	Geological data summary for boreholes drilled at the 352-m level of the Underground Research Laboratory 1988 February 5. Technical Record TR-477, Atomic Energy of Canada Limited.
Read, R.S.	1989	Geological data summary for boreholes drilled from the 300-m Level of the Underground Research Laboratory 1987 December 5 to 1988 May 17, Volume 1 and 2. Technical Record TR-473, Atomic Energy of Canada Limited.

Read, R.S., and R.A. Everitt	1988	Summary of geology for URL probehole 206-020-PH1. Technical memorandum, Atomic Energy of Canada Limited.
Read, R.S., and R.A. Everitt.	1987	Fracture zone #2 characterization - summary of geology near grouting experiment. Technical Memorandum GSEB-87-330, Atomic Energy of Canada Limited.