Jerry J. Leyden, B.S., M.B.A.

President

AKRON RUBBER DEVELOPMENT LABORATORY, INC.

Akron, Ohio

1991 - To Present	President, Akron Rubber Development Laboratory, Inc. with responsibilities for Technical, Marketing, Laboratory, Administrative and Operations activities of departments.
1990 - 1991	Vice President, Technical and Marketing, Midwest Elastomers, Inc., Wapakoneta, Ohio, North America's largest manufacturer of cryogenically ground rubber and plastic materials, with responsibilities for sales/marketing, technical and quality control.
1976 - 1990	Executive Vice President, Smithers Scientific Services, Akron, Ohio; Mr. Leyden was responsible for the Smithers' Tire Analysis Reports, Tire and Polymer Products Contract Testing programs, Corporate Engineering, Holography, Materials Sciences, and for the administrative, technical and consulting activities of a six-department laboratory. He also directed numerous projects in materials evaluation, research and development, and product testing.
1967 - 1976	Compounder, Project Manager, Group Leader, Project Engineer, Product Engineer, Firestone Tire and Rubber Company, Akron, Ohio. Mr. Leyden worked on passenger and truck tires in Development Compounding, radial passenger and light truck tires in O.E. Engineering, and conducted tire failure analyses as liaison to the Law Department.

Mr. Leyden also manages, and personally directs, projects involved in the evaluation of polymers, fillers, plasticizers, activators, processing aids, antidegradants and curatives, as well as molding methodologies and performance evaluation of rubber compounds. His experience in polymeric materials extends from electron beam irradiation and cryogenic processing of rubber materials to the functional performance of rubber goods in a broad variety of applications ranging in technology and sophistication from the aerospace, marine, pharmaceutical and nuclear molded rubber products to the more fundamental compounding involved in tires and automotive products.

His work in these areas has extended to raw material suppliers, manufacturers and users, both industrial and governmental, as well as the military, in the U.S.A. as well as abroad.

Mr. Leyden has conducted numerous technical audits of tire and molded goods rubber manufacturing facilities, evaluating the state-of-the-art of the manufacturing, managerial, and quality control functions. These audits, performed for a variety of clients in different industry segments, require close scrutiny of each process in the manufacturing stream from incoming raw materials to final inspection and shipping.

Mr. Leyden has presented papers on rubber compounding, analysis, testing, and quality control before The Rubber Division of the American Chemical Society, numerous A.C.S. affiliated Rubber Groups in North America, The Rubber Division of the Chemical Institute of Canada (Montreal and Toronto), The American Retreaders Association, and the National Tire Dealers and Retreaders Association.

Mr. Leyden has lectured at Geneva College, The University of Akron and Kent State University on various subjects as an authority on rubber compounding, testing, and quality control.

He has also developed and conducted seminars on rubber manufacturing, rubber chemistry, testing, and technology.

Defendants and plaintiffs have utilized the services and the expertise of Mr. Leyden as an expert in failure analysis of rubber and rubber/composite materials; he has been recognized as a technical expert on a broad range of elastomeric products and patents, and has testified as such in litigation in the continental United States, Alaska, Hawaii , the Virgin Islands, and West Germany.

His formal education consists of a B.S. degree in Chemistry from Ohio State University (1967) and an M.B.A. degree in Finance and Management from the University of Akron (1973).

Mr. Leyden has been awarded status as Diplomate: American Board of Forensic Examiners International (Board Cert. # 4036).

Continuing Education: Certificate of Achievement, Professional Development Program, Society of Automotive Engineers, "Introduction to Failure Mode and Effects Analysis for Product Design (Design FMEA)," January 20, 2006 (.65 CEU).

PUBLISHED PAPERS AND PRESENTATIONS

"Latest Legal Aspects of the Tire Industry," Tire Industry Conference, Hilton Head, SC, March 14, 2008.

"Failure Analysis Fundamentals", Materials Technology Institute 2008 TAC 95 Meeting, Tampa, FL, February 26, 2008.

"Anti-Degradants in Rubber Compounds: Part I," Leyden, J. J. (co-author), Rubber and Plastics News, January 8, 2007.

Training Program, Rubber Technical Training Seminar, April 21, 2004.

Keynote Address, *Rubber Technical Training Seminar*, Sartomer Corporation, Exton, Pennsylvania, April 20, 2004.

"Failure Analysis of Rubber Products," Elastomer Technology: Special Topics, First Edition, The Rubber Division, American Chemical Society, Akron, Ohio, 2003, Chapter 19, pp. 568-587.

"SEM/EDX Analysis of Moisture-Aged Steelcord," ITEC 2002, Akron, Ohio, September 11, 2002.

PUBLISHED PAPERS AND PRESENTATIONS - (continued)

"SEM/EDX Analysis of Steelcord-Rubber Interface," Rubber & Plastics News, March 19, 2001.

"Analysis of Failed Rubber Linings—A Failure Analysis Methodology," Corrosion NACExpo 2001, Houston, Texas, March 16, 2001.

"Analysis of Steelcord-Rubber Interface by SEM/EDX; Controlled Experiments," ITEC, Akron, Ohio, September 12, 2000.

"Using SEM/EDAX in the Failure Analysis of Rubber/Steelcord Adhesion," Fall Symposium, The Microscopy Society of Northeastern Ohio, October 13, 1999.

"Automotive Rubber Component Qualification, Certification & Quality Control Evaluation: A 'Big Three' Approach in the United States," Auto Rubber -- India '98 Technical Conference, Bombay, India, May 5, 1998.

"Testing of Rubber Products -- A Global Perspective," ARDL Asia Pacific Symposium, Bangkok, Thailand, April 30, 1998.

"Rubber Performance and Predictability," Detroit Rubber Group Technical Symposium on Automotive Systems and Elastomer Applications, October 29, 1997.

"The Importance of Finite Element Analysis to the Rubber Industry," Elastomer FEA '97, The University of Akron, Akron, Ohio, March 1997.

"FEA Support Testing for Elastomer Modeling," Rubber & Plastics News, July 1996.

"Non-Linear Finite Element Analysis Support Testing for Elastomer Parts," Rubber Division, American Chemical Society, Cleveland, Ohio, October 1995.

"Finite Element Analysis Support Testing for Elastomeric Engineering Components," Energy Rubber Group Fall Technical Meeting, Arlington, Texas, September 1995.

"Relaxation Phenomena of Automotive TPEs," Rubber & Plastics News, June 1995.

Moderator, *144th Fall International Technical Meeting,* International Rubber Conference, Orlando, Florida, October 1993.

"Relaxation Phenomena of Thermoplastic Elastomers Exposed to Severe Under-Hood Service Conditions," Regional Technical Conference of the Society of Plastics Engineers, Ft. Mitchell, Kentucky, October 1993.

"Performance Prediction of Elastomeric Gasket Materials By Compression Stress Relaxation Testing," Rubber Division, A.C.S. Technical Symposium on Predictive Testing, Denver, Colorado, May 1993.

*"Predicting the Life of TPE Seals in Severe Service Environments," 7*th International Conference on Thermoplastic Elastomer Markets and Products, Orlando, Florida, February 1993.

Moderator, *"Elastomers in Mechanical Applications,"* Rubber Division, A.C.S. Spring Technical Meeting, Louisville, Kentucky, May 1992.

PUBLISHED PAPERS AND PRESENTATIONS - (continued)

"Cryogenic Processing and Recycling," Rubber World, March 1991.

Symposium Moderator, *"Environmental Issues in the Rubber Industry,"* Akron Rubber Group, Fall 1991.

Training Program, Properties, Material Selection and Evaluation of Thermosets and Thermoplastics, July 1988.

Co-Chairman, Best Technical Symposium - Techniques of Analysis and Reconstruction of Rubber Compounds, American Chemical Society Rubber Division, April 1988.

"National Tire R&D Center; Establishing Test Facilities and Priorities," Workshop on Technology in Indian Tyre Industry, New Delhi, November 1987.

Training Program, 6 Weeks Duration, Development, Testing, Processing and Evaluating Automotive Rubber Compounds, November and December 1987.

"Rubber Products Failures - Burdens on the Defense," American Chemical Society Rubber Division, April 1986.

Course on Tire Failure Mode Analysis, State of Maryland Highway Patrol, Baltimore, Maryland, 1986.

"Technical Trends in Elastomers," Proprietary Presentation, June 1985.

"Quality in the Rubber Industry - An Independent Perspective," Elastomerics, March 1985.

"Selection Criteria for Plastics Used in Through-Hull Fittings," Seventh Chesapeake Sailing Yacht Symposium, U.S. Naval Academy, January 1985.

"Retread Failure Modes and Quality Problems," RMA Retread and Repair Materials Committee Meeting, October 1984.

"Use of Lab Instruments in Failure Analysis," Rubber World, September 1984.

"Compounding and Construction Trends in Medium Duty Truck Tires," Akron Rubber Group, Fall Meeting, October 1983.

"Changes in Raw Materials and Tire Technology and Their Impact on the Retreader," National Tire Dealers and Retreaders Association, Inc., March 1982.

"Reconstruction of Rubber Compounds by Chemical Analysis," Elastomerics, April 1980.

"Radial Tire Compounding," Rubber Age, April 1972.

"Compounding for Radial Passenger Tires," Akron Rubber Group, Inc., Technical Symposiums 1971 - 1972.

ORGANIZATION MEMBERSHIPS AND ACTIVITIES

Member, ACFEI, The American College of Forensic Examiners International

Diplomate, The American Board of Forensic Examiners (Board Cert. # 4036)

Society of Automotive Engineers (SAE); past member of Committee on Automotive Rubber Specifications

ORGANIZATION MEMBERSHIPS AND ACTIVITIES - (continued)

Polymer Division, American Chemical Society (ACS)

Rubber Division, American Chemical Society (ACS)

Society of Plastics Engineers (SPE)

American Society for Testing and Materials (ASTM)

Who's Who Worldwide, 1994-1995 Registry of Business Leaders

Akron Rubber Group

Detroit Rubber Group

REV: 06/10/08

"Progress Through Innovation, Technology and Customer Satisfaction"

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LEGAL AND FORENSIC SERVICES

1. Client acknowledges that he solely is responsible for the retention of **Akron Rubber Development Laboratory's (ARDL)** services and the payment of **ARDL's** invoices for work contracted hereunder--payments due to third parties are the responsibility of the **Client,** not **ARDL.** It is our custom and practice to bill the **Client** directly and solely for any and all services rendered.

2. All forensic work performed is on a retainer basis, the initial amount of which for this particular investigation is: $1,000.00 . Work will commence upon receipt of retainer and this sheet, signed below.

3. Prior to commencement of a work assignment, a ten (10) -day written notice is required to cancel a project and all costs incurred shall be due and payable by the **Client** and any retainers shall be forfeited. Projects canceled while in progress are subject to a 15% cancellation fee in addition to accrued fees and expenses.

4. As a result of **ARDL** performing these services, the **Client** agrees that for both current or future engagement of the Laboratory by the **Client**, that he will pay the fee generated as a result of said involvement or engagement in accordance with the fee schedule currently in effect at the time. The present fee schedule is listed below.

5. **HOURLY RATES AND EXPENSES INVOLVING FORENSIC SERVICES**

* Professional Consulting[(1)]	$250.00/hr.
* Laboratory Testing[(2)]	$115.00/hr.
* Administrative Services (Clerical and Support)	$ 50.00/hr.
* Storage Charges for Forensic Evidence[(3)]	$ 30.00/mo. or part thereof

NOTES: [(1)]Portal to Portal plus travel expenses at cost plus 15%. Domestic Air Travel via Coach Class; International Air Travel is via Business Class.
[(2)]Plus Expenses for unique chemicals or apparatus if required. (Client will be advised of such a need in advance.)
[(3)]For evidence stored at ARDL, Inc. beyond 60 days

6. The Laboratory warrants only that it will use its best effort to perform the services requested using, whenever possible, established techniques and/or recognized National Standards and procedures. The Laboratory's liability under this warranty and work assignment shall be limited to the amount of the invoices unless greater liability is required by the **Client** and the appropriate fee paid commensurate with the liability limitation sought.

7. In the event of nonpayment of fees for services rendered, the **Client** agrees to pay court costs and reasonable attorney fees for the collection of unpaid fees. This agreement shall be deemed to have been consummated in Ohio and shall be governed by Ohio law.

8. It is agreed and understood that the terms contained herein are contractual obligations of the parties in respect to this work assignment.

ACCEPTED BY: _____ **DATE:** _____