
Appendix A

- 1-Curriculum Vitae**
 - 2-Compensation**
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DEBORAH L. HATHAWAY

Hydrologist

EDUCATION

MS Civil Engineering (Hydrology and Water Resources), 1982, Colorado State University, Fort Collins, Colorado

MA Secondary Education (Science), 1977, University of New Mexico, Albuquerque, New Mexico

BA Liberal Arts, 1974, Saint John's College, Santa Fe, New Mexico

REGISTRATIONS

Professional Engineer Colorado No. 31578
New Mexico No. 10150
New York No. 076088
Maryland No. 17816

Certified Professional Hydrologist (Groundwater) No. 966, American Institute of Hydrology

PROFESSIONAL HISTORY

S.S. Papadopoulos & Associates, Inc., Boulder, Colorado
Principal, 2001
Vice President, 1994-present
Senior Hydrologist, 1988-1994

University of Colorado, Boulder, Colorado
Instructor, Fall 2003, for Geology 3030, *Introduction to Hydrogeology*

New Mexico State Engineer Office, Santa Fe, New Mexico
Technical Division, Water Resource Engineering Specialist, 1984-1988
Water Rights Division, Water Resource Specialist, 1982-1984

U.S. Geological Survey, Water Resources Division, Santa Fe, New Mexico
Hydrologic Field Assistant, 1979-1981

SUMMARY OF QUALIFICATIONS

Ms. Hathaway has over 25 years experience conducting and managing hydrologic investigations involving groundwater, water-supply development, water rights, irrigation hydrology, riparian and in-stream flow conditions, contaminant transport, and groundwater remediation, including providing technical support on these issues for litigation. Quantitative water resource evaluations have involved groundwater modeling, regional and basin-scale water budget analysis, modeling of conjunctive use, alternatives analysis, probabilistic analysis of surface-water supplies and evaluation of impairment issues; and, management of supporting field investigation, database and GIS development. Remedial investigation, design and construction projects have included evaluation of the source, extent, fate and transport, and potential receptors of environmental contamination; selection of remedial approach; design of soil and groundwater remedial systems; construction oversight; and performance evaluation during system operation.

Ms. Hathaway has worked with legal counsel, regulatory agencies, industry representatives, and other environmental consultants to frame and implement mutually acceptable and cost-effective solutions to water-resource, water rights, and environmental problems. Ms. Hathaway has provided expert testimony in surface water and groundwater issues, has led stakeholder workshops, and has provided public presentations on water resource and water supply matters. Ms. Hathaway manages SSP&A's Boulder, Colorado office.

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REPRESENTATIVE PROJECT EXPERIENCE

S.S. Papadopoulos & Associates, Inc., Boulder, Colorado

Ms. Hathaway conducts and directs a wide variety of hydrologic, water supply development, environmental and groundwater remediation projects. Examples of water resource projects managed and descriptions of associated work are presented below, followed by examples of projects involving groundwater remediation, mining hydrology, and contaminant transport:

WATER RESOURCE AND WATER SUPPLY ANALYSIS, PLANNING AND MANAGEMENT; LITIGATION SUPPORT

- For the U.S. Army Corps of Engineers, 1999 to 2004 – Directed the Middle Rio Grande Water Supply Study, a comprehensive basin-scale water resource characterization extending along the Rio Grande from Cochiti to Elephant Butte Reservoir. This study characterized the probabilistic conjunctive use water supply under the constraints of the Rio Grande Compact, given historical, present and hypothetical future conditions. Activities included research and compilation of an extensive metadata database of water resource data; quantification of a basin-wide probabilistic water budget; simulation of groundwater pumping under hypothetical regional planning scenarios; water supply risk analysis modeling; and, organization and facilitation of stakeholder workshops. To support regional water planning, proposed development and conservation options were evaluated with regard to impacts on flow in streams and aquifer depletion.
- For the New Mexico Interstate Stream Commission, 2000 to present – Served as Program Manager for surface-water evaluations along the Rio Grande. Projects include:

NEPA water operations alternatives analysis: Provided representation on the Upper Rio Grande Water Operations Review EIS Water Operations Team to evaluate the opportunities for optimizing operations of surface-water facilities to meet water supply, flood control and environmental needs; review and assistance with URGWOM planning model (*Riverware*) for alternatives analysis.

Irrigation efficiency study. Directed a comprehensive evaluation of the Middle Rio Grande Conservancy District irrigation system efficiency and metering program. Review of historical supply and demand, system operations information, and, in conjunction with agricultural engineers, evaluation of opportunities for efficiency improvement. In conjunction with Colorado State University, supported the development of a Decision Support Model for optimal demand-driven irrigation scheduling under supply limited conditions.

River, canal, and drain seepage studies: Directed an extensive field program to assess river and conveyance channel seepage conditions spanning two irrigation seasons and the intervening non-irrigation season.

Groundwater assessment: Directed a groundwater resource assessment in two basins to support regional water planning needs. Communicated with stakeholders.

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**REPRESENTATIVE
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Strategic planning and litigation support: Identified data gaps relevant to the agency mission; developed preliminary scope for field programs to evaluate surface-water/groundwater interactions; implemented program of monitoring and evaluation of flows related to endangered species issues. Provided litigation support on issues relating to evaluation of stream conditions, proposed critical habitat and hydrology as related to endangered species issues.

- For U.S. Bureau of Reclamation, Mid-Pacific Region, 1999–2000 – Directed the development of multiple three-dimensional groundwater models of the riparian zone along a 150-mile reach of the San Joaquin River, incorporating river boundary conditions identified in HEC-2 model simulations. These models were developed to provide a tool for simulating groundwater/surface-water interactions and riparian conditions associated with stream restoration alternatives. Compiled historical water supply and water use information; collected and reviewed driller logs from over 300 wells to assess geologic conditions; developed five models and simulated alternative flow conditions to assess the transient nature of river seepage and riparian groundwater conditions and the ability to maintain flows under varying antecedent conditions.
- For the Middle Rio Grande Endangered Species Act Collaborative Program (administered by the U.S. Bureau of Reclamation), 2003 to present – Directed the development of a suite of five riparian groundwater models spanning the Middle Rio Grande region from north of Albuquerque to south of Socorro. Riparian groundwater models incorporate boundary conditions from complimentary models, including a USGS regional groundwater model and a FLO-2D model of river stage/flooded area under variant flood release conditions. The models are calibrated with paired groundwater level and river stage data and are used to evaluate altered river seepage and shallow groundwater conditions given hydrologic changes potentially associated with the re-establishment of Silvery Minnow and Southwest Willow Flycatcher habitat. Work is conducted in partnership with the New Mexico Interstate Stream Commission.
- For a basin in northwestern New Mexico, 1988 to present – Performed three-dimensional modeling studies to evaluate impacts of historic and proposed groundwater withdrawals on river and spring flows. Prepared relational databases of hydrologic data from state and federal agencies for a period of record spanning many decades. Evaluated aquifer tests.
- For the New Mexico Office of the State Engineer, 1998 to present – Conducted quantitative water resource evaluations to address questions related to the Rio Grande Project operations, water rights administration, conjunctive use of groundwater and surface water resources, interstate water allocation and water management. Developed basin-wide groundwater model with detailed representation of river, irrigation canals and drains. Evaluation of historic records of flow conditions, water delivery for agriculture and other uses, seepage conditions and aquifer-stream interactions. Provide technical support in mediation and litigation.

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**REPRESENTATIVE
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- For the Kingdom of Saudi Arabia – Evaluated the groundwater management plan for multi-layered aquifer systems. Provided independent review of water supply projections.

**GROUNDWATER REMEDIATION, MINING HYDROLOGY, CONTAMINANT TRANSPORT,
LITIGATION SUPPORT**

- For a mining site in Utah – Evaluated impacts of relic mine tailings on groundwater quality for allocation of responsibility under Natural Resources Damage Claim. Provided peer review and oversight to consulting company conducting field investigation. Responsible for hydrogeologic and geochemical investigations utilizing site-specific and regional data to identify attenuation of metals and sulfates in groundwater.
- At former manufactured gas facilities and creosoting operations in Utah and Idaho – Evaluated the origin, timing, extent, and impact of creosote and coal tar DNAPLs on groundwater quality. Provided expert report for use in litigation to recover remediation costs from insurance carriers.
- For the Berkeley Pit, Butte, Montana – Evaluated the impact of mining conditions on pit-level water levels and water quality. Conducted and directed field investigations, hydrologic modeling, and geochemical evaluations to provide technical support in litigation over allocation of liability between current and previous owners. Evaluated impacts of current mine operations on remedial options through modeling and geochemical analyses.
- For a manufacturing facility in Colorado – Directed remedial investigation, remedial design, and installation of groundwater recovery system to address PCE-impacted groundwater. Directed groundwater modeling of impacted area, prepared groundwater monitoring plans, and conducted capture-zone analyses for the existing remedial well systems.
- At seven natural gas compressor station sites in Colorado – Designed and implemented an environmental investigation to identify the extent of free product in soil and dissolved plumes in groundwater. Directed pre-design field programs to assess geochemical conditions, and conducted pilot tests of remedial technologies. Supervised site project managers in the drilling of horizontal wells and the construction and start-up of soil vapor extraction and air-sparging remedial systems.
- At the Resolve Superfund Site, Massachusetts – Work included (1) an assessment of geochemical and hydrogeologic data to identify the potential extent of PCE and TCE as DNAPL and dissolved-phase contaminants, and analyses of aquifer tests; (2) development and calibration of a three-dimensional numerical groundwater flow and particle-tracking model; (3) capture zone modeling analyses of alternate extraction well scenarios; and (4) design of an extraction well system considering performance objectives, wetland issues, and risk of DNAPL remobilization. Served as Expert Committee member and prepared presentations for PRP steering committee and the U.S. EPA on remediation risks and goals at DNAPL sites.

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**REPRESENTATIVE
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- For the Heath Tecna manufacturing facility near Kent, Washington – Directed groundwater investigations, designed extraction well system, and provided oversight of remedial action implementation for Corrective Measures System (CMS) at this RCRA facility. Investigations included evaluation of aquifer performance tests and water quality analyses; two- and three-dimensional modeling analyses to characterize the groundwater flow system and optimize placement of recovery wells; and, fate-and-transport modeling.
- For the MW Manufacturing Superfund Site in Pennsylvania – Evaluated EPA’s RI/FS for this former recycling facility. Provided technical arguments to EPA in support of modifications to the proposed groundwater extraction system to achieve better and more cost-effective control of PCE-impacted groundwater considering hydrogeologic uncertainties and presence of DNAPL. Prepared work plan pre-design investigation and remedial design.
- At 18 hazardous waste sites in fractured bedrock environment – Evaluated site characterization data and coordinated modeling analyses of the fate and transport of PCBs through the unsaturated and saturated zone to receptor wells for use in risk assessment analyses in support of negotiated clean-up levels.
- For Heleva Landfill Superfund Site – Conducted groundwater-flow modeling; evaluated leachate-production predictions under various remedial scenarios, and determined optimal well configuration and pumping rates for extraction wells. Modified the remedial design resulting in an Amended Administrative Order for site remediation. Conducted capture zone analyses and prepared Preliminary Design for groundwater extraction. Directed fate-and-transport modeling to evaluate contaminant attenuation. Served as expert witness for insurance litigation related to cost recovery.
- At a petroleum products distribution terminal in Indiana – Performed three-dimensional groundwater flow modeling and contaminant fate-and-transport modeling (MT3D) as part of a feasibility study. Assessed biodegradation parameters through modeling of past contaminant distributions. Modeling results were used to evaluate the effectiveness and cost efficiency of several proposed remediation plans. Negotiated with Indiana Department of Environmental Management to gain acceptance for an interim remedial system that was subsequently implemented.

New Mexico State Engineer Office, Technical Division, Santa Fe, New Mexico
Conducted and directed projects involving quantitative groundwater hydrology and hydrogeologic impacts of water resource appropriations. Responsibilities included the development of regional and site-specific numerical models of groundwater flow and quality, the formulation and direction of groundwater studies required for water rights hearings and interstate stream litigation, presentation of expert testimony, modification of off-the-shelf numerical simulation models for specific groundwater analysis, and development of groundwater databases for use in calibration of groundwater models. Details of these activities are presented below:

- Testified before the Special Master of the U.S. Supreme Court in *Texas vs. New Mexico* on behalf of New Mexico regarding the development of a 3-

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**REPRESENTATIVE
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- dimensional groundwater flow model of the southern Roswell Basin for determining the effect of initiating or ceasing pumping from wells on Pecos River flow.
- Constructed a chloride transport model of the Hueco Bolson in Texas and simulated water quality degradation under future pumping scenarios. Presented expert testimony on the water-quality analyses and drinking water standards in hearings on City of El Paso water rights applications.
 - Conducted hydrologic analyses of the shelf, reef and basin aquifers in southeastern New Mexico and west Texas to estimate the effect of fluid withdrawals in and near the Capitan Aquifer on the flow of Carlsbad Springs. Developed a database on oil, gas and groundwater withdrawals in the seven county area. Developed and calibrated a groundwater flow model.
 - Coordinated preparation of hydrogeologic studies, reports and expert testimony by contract engineers and hydrologists for use in hearings on proposed development of municipal wellfields having a capacity of 264 million gallons per day from deep alluvial basins and on the interstate transfer of ground water from New Mexico to Texas.
 - Developed and calibrated a groundwater flow model of the Tyrone, New Mexico area and quantified the hydrogeologic effects of mine dewatering proposed for an open-pit copper mine. Provided expert testimony on the analysis before the New Mexico State Engineer.

New Mexico State Engineer Office, Water Rights Division, Santa Fe, New Mexico
Reviewed water rights applications to evaluate the impact of proposed water development on existing water rights. Made recommendations based upon consideration of engineering, hydrologic, legal, and administrative constraints. Conferred and corresponded with the public on water rights matters. Coordinated presentation of Water Rights Division testimony for administrative hearings. Provided expert testimony on water rights and on surface-water and groundwater hydrology in district court and administrative hearings.

U.S. Geological Survey, Water Resources Division, Santa Fe, New Mexico
Analyzed hydraulic/hydrologic data to identify stream stage at flood frequencies and average and peak flows in ungaged streams as a function of climatological and other variables. Wrote FORTRAN programs and prepared results for publication.

**PROFESSIONAL
SOCIETIES**

Association of Groundwater Scientists and Engineers (Reviewer for *Groundwater*)
American Water Resource Association
New Mexico Geological Society
American Institute of Hydrology
Colorado Groundwater Association

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PUBLICATIONS

- MacClune, K.L., and D.L. Hathaway. 2003. Application of Paleo-Climate Data to Water Planning and Management. Presented at the 2003 American Water Resources Association Annual Conference, November 3-6, 2003, San Diego, California. Oral Presentation Session 63. November 6.
- Hathaway, D.L., K.L. MacClune, and K. Flanigan. 2003. Multi-Region Water Supply Alternatives Analysis in a Probabilistic Framework. Presented at the 2003 American Water Resources Association Annual Conference, November 3-6, 2003, San Diego, California. Oral Presentation Session 41. November 5.
- Hathaway, D.L. 2003. Transient Groundwater Riparian Conditions and Sensitivity to Changes in Hydrology, Geomorphology, and Vegetation. Presented at the 2003 American Water Resources Association Annual Conference, November 3-6, 2003, San Diego, California.
- Schmidt-Peterson, R., N. Shafike, P. Pegram, D.L. Hathaway, F.B. Grigsby, R.S. Bowman, L. Wilcox, T. Newton, and K. Schafer. 2003. Groundwater/Surface Water Monitoring in the Middle Rio Grande Basin: *Southwest Hydrology*. 2, no. 1.
- Blum, V.B., D.L. Hathaway, and K. White. 2002. Modeling Flow at the Stream-Aquifer Interface: A Review of this Feature in Tools of the Trade. American Water Resource Association Conference on Surface Water - Groundwater Interactions, July 2002.
- Hathaway, D.L. 2002. Myths of Sustainable Water Management: A Hydrologist's Perspective (abstract). Conference Proceedings from Allocating and Managing Water for a Sustainable Water Future: Lessons from Around the World, June 11-14, Boulder, Colorado. Natural Resources Law Center, University of Colorado Law School.
- Hathaway, D.L., and K. Flanigan. 2002. Legal and Physical Constraints on the Conjunctive Use Water Supply of the Middle Rio Grande Region. American Water Resource Association Conference on Surface Water--Groundwater Interactions, July 2002.
- Hathaway, D.L., and T.-S. Ma. 2002. Transient Riparian Aquifer and River Exchanges along the San Joaquin River. American Water Resources Association (AWRA) Summer Specialty Conference Ground Water/ Surface Water Interactions, Keystone, Colorado, July 2002.
- Lewis [MacClune], K.J., D. Hathaway, and N. Shafike. 2002. Evapotranspiration-Driven Diurnal Fluctuations in Groundwater Levels at San Marcial, New Mexico. American Water Resource Association Conference on Surface Water -- Groundwater Interactions, 1-3 July 2002, Keystone, Colorado.
- Lewis [MacClune], K.J., and D.L. Hathaway. 2002. New Mexico Climate and Hydrology: Is the Historic Record Valid for Predictive Modeling?: *Hydrologic Science and Technology*. 19, no. 1-4: 57.
- Lewis [MacClune], K.J., and D.L. Hathaway. 2002. Using Paleo-Climate Records to Assess the Current Hydrology of the New Mexico Middle Rio Grande: *Southwest Hydrology*. 1, no. 2: 20.

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PUBLICATIONS — continued

- Hathaway, D.L. 2001. Probabilistic Modeling of the Middle Rio Grande Water Supply. Annual Water Resource Conference Abstract Proceedings, American Water Resources Association, November 2001.
- Hathaway, D.L. 2001. Probabilistic Water Budget for the Middle Rio Grande. In *Water, Watersheds and Land Use in New Mexico, Impacts of Population Growth on Natural Resources, Santa Fe Region, New Mexico*. Decision-Makers Field Guide No. 1. New Mexico Bureau of Mines and Mineral Resources.
- Hathaway, D.L., and T.S. Ma. 2001. Sensitivity of Shallow Groundwater Elevations in the San Joaquin River Riparian Zone to River Flow and Regional Groundwater Conditions (abstract). Managing California's Groundwater: the Challenges of Quality and Quantity, 23rd Biennial Groundwater Conference and 10th Annual Meeting of the Groundwater Resources Association of California, October 2001.
- Ma, T.S., D.L. Hathaway, and A. Hobson. 2001. MODFLOW Simulation of Transient Surface Water/Groundwater Interactions in a Shallow Riparian Zone Using HEC-2-Based Water Surface Profiles. MODFLOW 2001 and Other Modeling Odysseys, Conference Proceedings, International Ground Water Modeling Center (IGWMC), Colorado School of Mines, Golden, Colorado, September 2001. Seo, Poeter, Zheng, and Poeter, editors. Vol. 1. 425-431.
- Hathaway, D.L. 1999. The Middle Rio Grande Water Supply Study. Proceedings, The Rio Grande Compact: It's the Law! 44th Annual New Mexico Water Conference, New Mexico Water Resources Research Institute and New Mexico Riparian Council, La Fonda on the Plaza, Santa Fe, December 2-3, 1999.
- Hathaway, D.L. 1995. Hydraulic Containment of Groundwater Contamination: Design and Performance Evaluation. Groundwater Forum, U.S. Environmental Protection Agency Technical Support Project General Meeting, Boston, Massachusetts.
- Hathaway, D.L., and M.J. Riley. 1995. Evaluating the Performance of Hydraulic Containment Systems. Presented at the American Institute of Hydrology Annual Meeting, Denver, Colorado, May 14-18, 1995.
- Hathaway, D.L., and M. Wolff. 1995. Comments on Parameter Uncertainty: A Post-Audit of Groundwater Contaminant Fate and Transport Model Projections. Proceedings of the American Geophysical Union, Front Range Hydrology Days, Colorado State University, Fort Collins, Colorado.
- Zheng, C., and D.L. Hathaway. 1991. MT3D: A New Modular Three-Dimensional Transport Model and its Application in Predicting the Persistence and Transport of Dissolved Compounds from a Gasoline Spill, with Implications for Remediation. (abstract): *Ground Water*. 29, no. 5, September-October: 755.
- Andrews, C.B., D.L. Hathaway, and S.S. Papadopoulos. 1990. Modeling the Migration and Fate of Polychlorinated Biphenyls in the Subsurface. Proceedings of the PCB Forum, Second International Conference for the Remediation of PCB Contamination, April 2-3, 1990, Houston, Texas. 64-82.

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PUBLICATIONS

— continued

- Hathaway, D.L., and C.B. Andrews. 1990. Fate and Transport Modeling of Organic Compounds from a Gasoline Spill. Proceedings of Petroleum Hydrocarbons and Organic Chemicals in Ground Water; Prevention, Detection, and Restoration, National Water Well Association and American Petroleum Institute, October 31-November 2, 1990, Houston, Texas. In *Ground Water Management*. 4. 563-576.
- Rao, B.R., and D.L. Hathaway. 1989. A Three-Dimensional Mixing Cell Solute Transport Model and its Application: *Ground Water*. 27, no. 4: 509-516.
- Hathaway, D.L. 1988. Hydrogeologic Effects of Dewatering an Open-Pit Copper Mine near Tyrone, New Mexico. New Mexico Geological Society Annual Meeting. In *Abstracts, New Mexico Geology*. 10, no. 3.
- Hathaway, D.L. 1988. *Plan for the Augmentation of Pecos River Flows for Repayment of Past Delivery Shortfalls to Texas*. New Mexico State Engineer Office. Hydrologic Report 88-3. 24.
- Hathaway, D.L. 1988. Use of a Regional Groundwater Flow Model for Water Rights Administration in a Southwest Alluvial Basin. Proceedings of the Focus Conference on Southwestern Ground Water Issues, Albuquerque, New Mexico, Association of Ground Water Scientists and Engineers. p. 12.
- Hathaway, D.L. 1987. *Evaluation of El Paso Water Utility Total Dissolved Solids Data*. New Mexico State Engineer Office. Hydrologic Report 87-6. 26.
- Hathaway, D.L. 1987. *Hydrogeologic Evaluation of A. T. Cross Cattle Company Application M-4750 through M-4759 to Appropriate Groundwater from the Mimbres Basin*. New Mexico State Engineer Office. Hydrologic Report 87-8. 26.
- Hathaway, D.L. 1986. *Hydrogeologic Evaluation of Proposed Transfer of Water from the Gila River to Tyrone by the Phelps Dodge Corporation*. New Mexico State Engineer Office. Hydrologic Report 86-3. 32.
- Hathaway, D.L. 1986. *Three-Dimensional Simulation of Groundwater Flow in the Southern Roswell Basin*. New Mexico State Engineer Office. Hydrologic Report 86-1. 11.
- Hathaway, D.L., and B.R. Rao. 1986. *Mesa-Nevins Wellfield Chloride Transport Model*. New Mexico State Engineer Office. Hydrologic Report 86-2. 19.

DEPOSITIONS, TESTIMONY, EXPERT WITNESS, AND LITIGATION SUPPORT

- 2004 Deposition. Stulb vs. Schlage Lock Co. et al. U.S. District Court, Colorado. Civil Action No. 03-RB-0002.
- 1998 Deposition. Air Products and Chemicals, Inc. vs. Hartford et al. U.S. District Court, New Jersey. Docket No. L 17134-89.
- 1997 Litigation support. Washington vs. ARCO. U.S. District Court, District of Montana. Case No. 93-22-BU.
- 1995 Designated expert witness. Utah Power & Light vs. California Union Insurance Company et al. U.S. District Court, Utah. Case No. 93-C-675B.

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**DEPOSITIONS,
TESTIMONY, EXPERT
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- 1994 Designated expert witness. Micro Motion, Inc. vs. Dover Industries, Inc. U.S. District Court, Colorado. Civil Action No. 93-C-2298.
- 1993 Designated expert witness. American Telephone and Telegraph Company vs. Aetna Casualty & Surety Co. et al. Superior Court of New Jersey. Docket No. W-56581-88.
- 1989 Expert Testimony. Texas vs. New Mexico. U.S. Supreme Court. No. 65 Original. (and 1985, 1986)
- 1984 Deposition. Mimbres Valley Irrigation Company vs. Salopek. U.S. District Court, New Mexico, Mimbres Valley Adjudication. Luna County Cause 6326, Subfile 81.
- 1983-1987 Hearing Testimony. State of New Mexico, on applications to appropriate or transfer groundwater or surface water.
- November 1983, Application M-464 & 467
November 1983, Application M-60 into M-421-A
April 1984, Application M-5259
June 1984, Application M-19, M-284, M-400 into M-69 and M-312 (Combined)
October 1984, Application RG-27921 & 27921-S
May 1985, Applications 02260, GSF-85 through S-2 and GSF-1281
July, 1985, Application M-375 into M-421-A
November, 1985, Applications M-5868 through M-5873-S-15
October, 1986, Application 02260, GSF-85 et al. (T)
May, 1987, Applications M-4750 through M-4759
June, 1987, Applications HU-12 through HU-71.

Appendix A-2 Compensation

Deborah L. Hathaway is billed at an hourly rate of \$193.00 per hour. Her time in trial and deposition is billed at twice this rate.