JENNY B. CHAPMAN

Research Hydrogeologist Desert Research Institute Division of Hydrologic Sciences 755 E. Flamingo Road Las Vegas, NV 89119

EDUCATION

M.A., 1984, University of Texas at Austin, Geology/Hydrogeology

B.S., 1981, Sul Ross State University, Alpine Texas, Geology/Chemistry

PROFESSIONAL EXPERIENCE

2008-2019	Program Manager, Technical Research and Engineering Services Contract with the U.S. Department of Energy National Nuclear Security Administration.
	Manages an interdisciplinary team of over 50 researchers (geoscientists, biologists, atmospheric scientists, archaeologists, risk assessors) providing a wide variety of environmental research and development support for Department of Energy activities focused on the Nevada National Security Site (formerly the Nevada Test Site), currently through a 5-year, \$34 million contract. Responsibilities include contract oversight, cost and performance reporting, health and safety compliance, security program oversight, quality assurance, and technical direction.
2015-present	Research Hydrogeologist, Desert Research Institute, Division of Hydrologic Sciences, Las Vegas, Nevada.
	Scientific leadership and program management of diverse hydrogeologic investigations, ranging from underground nuclear test sites, active military facilities, and oil and gas reservoirs. Emphasis on conceiving scientific scope to meet client and/or research objectives, and managing personnel and resources to meet those objectives. Continuation of responsibilities described below.
1997-2015	Associate Research Hydrogeologist, Desert Research Institute, Division of Hydrologic Sciences, Las Vegas, Nevada. Scientific leadership and program management of groundwater investigations at locations of underground nuclear testing. Planned, implemented & completed programs of field investigations involving drilling, testing, and sampling,

programs of field investigations involving drilling, testing, and sampling, numerical modeling of groundwater flow, dual-phase (gas and liquid) flow, and contaminant transport, geochemical and isotopic experiments and modeling, and regulatory and stakeholder interactions. Primary responsibility for conceiving of scientific scope to meet government-sponsor's objectives, developing and tracking budget and schedule, mentoring and guiding personnel, and interfacing with sponsor, regulators, and stakeholders. Shared responsibility for technical work products, particularly regarding geochemical and isotopic interpretations and conceptual model development.

1990-1996	 Assistant Research Hydrogeologist, Desert Research Institute, Water Resources Center, Las Vegas, Nevada. Research relating to hydrogeologic and hydrogeochemical characteristics of semi-arid regions with a particular focus on using isotopic techniques to define current and palohydrologic recharge conditions. Development of a growing program evaluating contaminant transport issues at underground nuclear tests distant from the Nevada Test Site, as described above.
1988-1990	Hydrogeologist, Desert Research Institute, Water Resources Center, Las Vegas, Nevada.Research regarding a variety of local (Las Vegas) and regional (southwest U.S.) water resource issues ranging from water re-use salinity problems to recharge characterization.
1985-1988	Hydrogeologist, Environmental Evaluation Group, State of New Mexico, Santa Fe, New Mexico.Independent research and evaluation of geologic, hydrologic, and geochemical studies related to the WIPP Site, the first geologic repository for radioactive waste in the United States. Major focus on groundwater flow and recharge.
1984-1985	Hydrogeologist, Radian Corporation, Austin, Texas. Conducted and reported on field and laboratory investigations of hazardous- waste sites and hydrocarbon spills and leaks.
1982-1984	Research Assistant, U.T. Bureau of Economic Geology, Austin Texas. Edited and wrote contract reports and participated in hydrologic and geochemical research in connection with the proposed high-level radioactive waste disposal site in Deaf Smith County, Texas.

PROFESSIONAL AFFILIATIONS

Geological Society of America, Member of Hydrogeology Division American Geophysical Union, Member

PEER-REVIEWED ARTICLES

- Ye, Ming, Wang, L., K. Pohlmann, and J. Chapman, 2016. Evaluating Groundwater Interbasin Flow Using Multiple Models and Multiple Types of Data. *Groundwater*, Blackwell Publishing Ltd., doi: 10.1111/gwat.12422.
- Reeves, D.M., R. Parashar, K. Pohlmann, C. Russell, and J. Chapman, 2014, Development and Calibration of Dual-Permeability Flow Models with Discontinuous Fault Networks. *Vadose Zone Journal* doi: 10.2136/vzj2013.10.0183.
- Zhang, Y., D.M. Reeves, K. Pohlmann, J. Chapman, and C. Russell, 2013. Fractional dynamics of tracer transport in fractured media from local to regional scales. *Central European Journal* of Physics, 11(6), special issue "Fractional Dynamics", pp.634-645.

- Daniels, J.I. and J. Chapman, 2013. Determination and Maintenance of *De Minimis* Risk for Migration of Residual Tritium from 1969 Project Rulison Nuclear Test to Nearby Hydraulically Fractured Natural-Gas Wells. *Health Physics Journal*, manuscript number HPJ-D-12-00235R1.
- Reeves, D.M., K. Pohlmann, G. Pohll, M. Ye, and J. Chapman, 2010, Incorporation of Conceptual and Parametric Uncertainty into Radionuclide Flux Estimates from a Fractured Granite Rock Mass. *Stochastic Environmental Research and Risk Assessment*, published online DOI 10.1007/s00477-010-0385-0.
- Zhu, J., K. Pohlmann, J. Chapman, C. Russell, R. Carroll, and D. Shafer, 2010. Sensitivity to Formation Porosity of Contaminant Transport from Nevada Test Site to Yucca Mountain. ASCE Practice Periodical of Hazardous, Toxic, and Radioactive Waste. doi:10.1061/(ASCE)HZ.1944-8376.0000047
- Zhu, Julian; Pohlmann, Karl; Chapman, Jenny; Russell, Charles; Carroll, Rosemary; Shafer, David; 2010. Sensitivity of Solute Advective Travel Time to Porosities of Hydrogeologic Units. *Ground Water*, v.48. doi:10.1111/j.1745-6584.2009.00664.x
- Ye, M., K.F. Pohlmann, J.B. Chapman, G.M. Pohll, and D.M. Reeves, 2009, A Model-Averaging Method for Assessing Groundwater Conceptual Model Uncertainty. *Ground Water* 48(5), pp. 716-728. 10.1111/j.1745-6584.2009.00633.x
- Ye, M.; Cooper, C.A.; Chapman, J.B.; Gillespie, D.; Zhang, Y.; 2009. A geologically based Markov chain model for simulating tritum transport with uncertain conditions in a nuclearstimulated natural gas reservoir, SPE Reservoir Evaluation & Engineering, 12(6), 974-984. SPE-114920-PA. doi: 10.2118/114920-PA.
- Hassan, A.E., Bekhit, H.M., and Chapman, J.B., 2009. Using Markov Chain Monte Carlo to quantify parameter uncertainty and its effect on predictions of a groundwater flow model. *Environmental Modeling and Software*, 24(6):149-163.
- Ye, M., Pohlmann, K., and J. Chapman, 2008. Expert Elicitation of Recharge Model Probabilities for the Death Valley Regional Flow System. *Journal of Hydrology*, v.354, pp.102-115.
- Hassan, A. E., J. B. Chapman, and K. F. Pohlmann, 2004. Uncertainty Analysis of Seawater Intrusion and Implications for Radionuclide Transport at Amchitka Island's Underground Nuclear Tests, *In* Coastal Aquifer Management: Monitoring, Modeling, and Case Studies, Edited by A. H.-D. Cheng and D. Ouazar, Lewis Publishers, CRC Press, pp.205-231.
- Reimus, P., G. Pohll, T. Mihevc, J. Chapman, M. Haga, B. Lyles, S. Kosinski, R. Niswonger, and P. Sanders, 2003. Testing and Parameterizing a Conceptual Model for Solute Transport in a Fractured Granite using Multiple Tracers in a Forced-Gradient Test. *Water Resources Research* 39(12):1356-1370.
- Papelis, C, Um, W., Russell, C.E., Chapman, J.B., 2003. Measuring the specific surface area of natural and manmade glasses: effects of formation process, morphology, and particle size. *Colloids and Surfaces* 215(1-3), pp.221-239.
- Chapman, J., B. Lewis, and G. Litus, 2003. Chemical and isotopic evaluation of water sources to the fens of South Park, Colorado. *Environmental Geology* 43(5).

- Pohlmann, K.F., A. Hassan, and J. Chapman, 2002, Modeling Density-Driven Flow and Radionuclide Transport at an Underground Nuclear Test: Uncertainty Analysis and Effect of Parameter Correlation. *Water Resources Research* 38(5):10.1029/2001WR001047.
- Hassan, A., K. Pohlmann, and J. Chapman, 2001. Uncertainty Analysis of Radionuclide Transport in a Fractured Coastal Aquifer with Geothermal Effects. *Transport in Porous Media*, V. 43, pp.107-136.
- Pohlmann, K., A. Hassan, and J. Chapman, 2000. Description of Hydrogeologic Heterogeneity and Evaluation of Radionnuclide Transport at an Underground Nuclear Test. *Journal of Contaminant Hydrology*, V. 44, pp.353-386.
- Pohll, G., A.E. Hassan, J.B. Chapman, C. Papelis, and R. Andricevic, 1999. Modeling Ground Water Flow and Radioactive Transport in a Fractured Aquifer. *Ground Water*, V.37(5), pp.770-784.
- Tyler, S.W., J.B. Chapman, S.H. Conrad, D.P. Hammermeister, D. Blout, J. Miller, M.J. Sully, and J.M. Ginanni, 1996. Soil Water Flux on the Nevada Test Site: Temporal and Spatial Variations Over the Last 120,000 Years. *Water Resources Research*, V.32, No.6, pp.1481-1499.
- Mihevc, T.M., J.B. Chapman, and B.F. Lyles, 1996. The Application of Borehole Logging to Characterize the Hydrogeology of the Faultless Nuclear Test Site, Nevada. *Hydrogeology Journal*, V.4, No.4, pp.83-97.
- Hokett, S.L., J.B. Chapman, S.D. Cloud, 1992. Potential Use of TDR for Measuring Water Content in Rock. *Journal of Hydrology*, Vol. 138, p. 89-96.
- Chapman, J.B., N.L. Ingraham, and J.W. Hess, 1992. Isotopic Investigation of Infiltration and Unsaturated Zone Processes at Carlsbad Cavern, New Mexico. *Journal of Hydrology*, Vol. 133. p. 343-363.
- Hokett, S.L., J.B. Chapman, and S.D. Cloud, 1992. TDR Response to Lateral Soil Water Content Heterogeneities. *Soil Science Society of America Journal*, Vol. 56, No. 1. pp. 313-316.
- Chapman, J.B. and C.W. Kreitler, 1990. The Unsaturated Zone of the Salt Flats of West Texas, in C.W. Kreitler and J.M. Sharp, Jr., (eds.). Hydrogeology of Trans-Pecos Texas. Geological Society of America Field Trip Guidebook No. 25, pp. 59-64.
- Ingraham, N.L., J.B. Chapman and J.W. Hess, 1990. Stable Isotopes in Cave Pool Systems: Carlsbad Cavern, New Mexico. *Chemical Geology (Isot. Geosci. Sect.*), 86:65-74.

CONFERENCE PROCEEDINGS

- Reeves, Donald, Rishi Parashar, Eric M. LaBolle, Yong Zhang, Karl Pohlmann, Chuck Russell, and Jenny Chapman. Integrated Use of Data and Numerical Models for Site Conceptual Model Development in Complex Hydrogeologic Systems. National Ground Water Association's Conference on Fractured Rock and Groundwater on September 24, 2019, in Burlington, Vermont.
- Bacon, S. N., Miller, J. J., Chapman, J. B., 2018: <u>Evaluating Vulnerability of Closed Uranium Mill</u> <u>Tailing Sites to Event-Triggered Surface Erosion</u>, 2018 Long-Term Stewardship Conference: Grand Junction, Colorado, August 20, 2018-August 24, 2018

- Cooper, C. A., Chapman, J. B., Hodges, R., Dayvault, J., 2017: <u>Radionuclide migration at a</u> <u>Plowshare Program site: the Gasbuggy Underground Nuclear Test Site, San Juan County,</u> <u>New Mexico</u>, Waste Management: Phoenix, March 5, 2017-March 9, 2017
- Thomas, J. M., Pohll, G. M., Chapman, J. B., Pohlmann, K. F., Parashar, R., Rybarski, S. C., Hershey, R. L., Fereday, W. H., 2017: <u>Hydraulic fracturing in the upper Humboldt River</u> <u>basin, Nevada, USA. 15th Water-Rock Interaction International Symposium, WRI-15</u>, *Procedia Earth and Planetary Science*, 17, 189-192, doi: 10.1016/j.proeps.2016.12.065
- Thomas, J., G. Pohll, J. Chapman, K. Pohlmann, R. Parashar, S. Rybarski, R. Hershey, and W. Fereday, 2016. Hydraulic Fracturing in the upper Humboldt River basin, Nevada USA. Proceeding Paper in 15th Water-Rock Interaction International Symposium, WRI-15.
- Miller, J.J., S.A. Mizell, G.D. McCurdy, G. Nikolich, V. Etyemezian, and J. Chapman, 2015. Fate and Transport of Contaminants at Soils Sites. Peer-reviewed paper in WM2015 Proceedings, Waste Management Symposium, Phoenix, Arizona, March 15-19, 2015.
- Reeves, D., R. Parashar, K.F. Pohlmann, C.E. Russell, E. LaBolle, Y. Zhang, and J.B. Chapman, 2014. Radionuclide Containment Properties of Fractured and Faulted Volcanic Tuff Units at the T-Tunnel Complex, Rainier Mesa, Nevada National Security Site. Peer-reviewed paper in WM2014 Proceedings, Waste Management Symposium, Phoenix, Arizona.
- Reeves, D.M., R. Parashar, K. Pohlmann, E. LaBolle, Y. Zhang, C. Russell, and J. Chapman, 2011. Predictions of Long-Term Radionuclide Transport at Rainier Mesa, Nevada National Security Site. 242nd American Chemistry Society National Meeting, special session
 "Understanding Behavior and Fate of Contaminants in Vadose Zone Environments" where selected conference papers will appear in a special issue in Vadose Zone Hydrology. Denver.
- Chapman, J.B., C. Cooper, M. Ye, R. Hodges, R. Hutton, J. Craig, and T. Pauling, 2009.
 Balancing Subsurface Restrictions And Resource Access Under Conditions Of Changing Land Use At The Rulison Underground Nuclear Test Site, Piceance Basin, Colorado, USA.
 Peer-reviewed paper in WM2009 Proceedings, Waste Management Symposium, Phoenix, Arizona.
- Chapman, J.B., G. Pohll, A. Hassan, and K. Pohlmann, 2007. Using Uncertainty to Guide Characterization, Closure, and Long-Term Management of an Underground Nuclear Test Site. International Symposium on Technology and Society: Rick, Uncertainty, Vulnerability, Technology, and Society. Las Vegas, Nevada. IEEE Catalog Number 07CH37835C, ISBN: 1-4244-0587-4.
- Pohlmann, K., M. Ye, G. Pohll, and J. Chapman, 2007. Use of Numerical Groundwater Modeling to Evaluate Uncertainty in Conceptual Models of Recharge and Hydrostratigraphy. International Symposium on Technology and Society: Rick, Uncertainty, Vulnerability, Technology, and Society. Las Vegas, Nevada. IEEE Catalog Number 07CH37835C, ISBN: 1-4244-0587-4.
- Cooper, Clay, M. Ye, and J. Chapman, 2006. "Tritium Transport Through a Low-Permeability Natural Gas Reservoir." Proceedings, TOUGH Symposium, Berkeley, California.

- Chapman, J., A. Hassan, and K. Pohlmann, 2002. Resolving Discrepancies Between Hydraulic and Chemical Calibration Data for Seawater Intrusion Groundwater Flow Models By Considering Climate-Driven Sea Level Change. *In* Sherif, M.M., V.P. Singh, and M. Elrashed (Eds.), Reviewed Proceedings of the International Conference on Water Resource Management in Arid Regions (WaRMAR), March 23-27, 2002, Kuwait, Volume 3. Balkema Publishers, the Netherlands, pp.379-397.
- Hassan, A. E., G. Pohll, K. F. Pohlmann, and J. B. Chapman, 2002. Groundwater Flow and Transport Modeling: Three Approaches for Three Different Environments, *In* M. M. Sherif, V. P. Singh, and M. El-Rashed (Eds.), Proceedings of the International Conference on Water Resources Management in Arid Regions, (WaRMAR), March 23-27, 2002, Kuwait, Volume 5: Hydrology and Water Resources. Balkema Publishers, the Netherlands, pp. 223-242.
- Chapman, J., Karl Pohlmann, Greg Pohll, Ahmed Hassan, Peter Sanders, Monica Sanchez, and Sigurd Jaunarajs, 2002. Remediation of the Faultless underground nuclear test: moving forward in the face of model uncertainty. Proceedings of Waste Management '02 Conference, Tucson, Arizona, 10p.

REPORTS

- Chapman, J. B., Nikolich, G., Shadel, C. A., McCurdy, G. D., Etyemezian, V. R., Miller, J. J., Mizell, S. A., 2018: <u>Tonopah Test Range Air Monitoring CY2017 Meteorological</u>, <u>Radiological, and Wind Transported Particulate Observations</u>, DOE/NV/0003590-25; DRI 45284
- Miller, J. J., Bacon, S. N., Chapman, J. B., 2018: <u>Erosion Assessment of the Edgemont Disposal</u> <u>Site, South Dakota</u>, paginated by section, DRI Publication No. 41274
- Chapman, J. B., Nikolich, G., Shadel, C. A., McCurdy, G. D., Etyemezian, V. R., Miller, J. J., Mizell, S. A., 2018: Tonopah Test Range Air Monitoring CY2017 Meteorological, Radiological, and Wind Transported Particulate Observations, DOE/NV/0003590-25; DRI 45284
- Miller, J. J., Bacon, S. N., Chapman, J. B., 2018: Erosion Assessment of the Edgemont Disposal Site, South Dakota, paginated by section, DRI Publication No. 41274.
- Chapman, J. G. Nikolich, C. Shadel, G. McCurdy, V. Etyemezian, J. Miller, and S. Mizell, 2017. Tonopah Test Range Air Monitoring: CY2016 Meteorological, Radiological, and Wind Transported Particulate Observations. DRI Publication No. 45279, DOE/NV/0003590-05, 59p.
- McGraw, D. S., Carroll, R. W., Pohll, G. M., Chapman, J. B., Bacon, S. N., Jasoni, R. L., 2016: Groundwater Resource Sustainability: Modeling Evaluation for the Naval Air Weapons Station, China Lake, California, Naval Air Warfare Center Weapons Division Technical report, NAWCWD TP 8811.
- Chapman, J., C. Cooper, B. Lyles, R. Hershey, and J. Healey, in review, Handbook: Collecting Groundwater Samples from Monitoring Wells in Frenchman Flat, CAU 98. Desert Research Institute, Division of Hydrologic Sciences Publication No. 45261, U.S. Department of Energy, Nevada Field Office report DOE/NV/0000939-23.

- Pohll, G., J. Chapman, K. Pohlmann, R. Plume, R. Parashar, R. Hershey, W. Fereday, D. Reeves, J. Thomas, and W. Albright, 2015. Interim Final Report, Hydraulic Fracturing in the Upper Humboldt River Basin, Aquifer Quality Assessment Program. DRI Report 41263.
- Cooper, C.A., and J.B. Chapman, 2015. Radionuclide Migration at the Gasbuggy Underground Nuclear Test Site. Desert Research Institute, Division of Hydrologic Sciences Publication No. 41262, U.S. Department of Energy, Office of Legacy Management Report LMS/GSB/S13226.
- Pohlmann, K. and J. Chapman, in review. Evaluation of the Conceptual Hydrogeologic Model for the Project Shoal Area, Nevada, Using Visualization Tools and Hydrochemical Data. DRI Letter Report prepared for Stoller, DOE Office of Legacy Management, 59p.
- Daniels, J., J. Chapman, and K. Pohlmann, 2015. Approximating dose and risk for contaminants in groundwater from the underground nuclear test area of the Nevada National Security Site (NNSS). Desert Research Institute, Division of Hydrologic Sciences Publication No. 45262, U.S. Department of Energy, Nevada Field Office report DOE/NV/0000939-25.
- Fenstermaker, L., M. Cablk, J. Chapman, and M. Green, 2013. Recommended Core and Supplemental Environmental Monitoring Methods for Arid Land BP Installations. DRI Letter Report to BP International Limited, 56p.
- Lyles, B. and J. Chapman, 2012. Summary of Field Activities at the Central Nevada Test Area, Faultless Site, June 26-28, 2012. DRI Letter Report to Stoller, DOE Office of Legacy Management, 14p.
- Miller, J., R. French, T. Bullard, S. Bacon, and J. Chapman, 2012. Erosion Assessment of the L-Bar Disposal Site, New Mexico. DRI Letter Report to Stoller, DOE Office of Legacy Management, 101p.
- Chapman, J. and K. Pohlmann, 2011. Expert Elicitation Process in Support of Groundwater Model Evaluation for Frenchman Flat, Nevada National Security Site. Desert Research Institute Division of Hydrologic Resources Report 45236, DOE Nevada Site Office Report DOE/NV/26383-21, 17p.
- Daniels, J.I., and J.B. Chapman, 2011. Screening Assessment of Potential Human-Health Risk from Future Natural-Gas Drilling Near Project Rulison in Western Colorado. Desert Research Institute, Division of Hydrologic Science Report No. 45237, DOE Office of Legacy Management Report LMS/RUL/S08087, 26p.
- Lyles, B., G. McCurdy, J. Chapman, and D. Shafer, 2010. Timber Mountain Precipitation Monitoring Station: Letter Report No. 1. DOE/NV/26383-LTR2010-02.
- Cooper, C.A., J.B. Chapman, Y. Zhang, R. Hodges, and M. Ye, 2010. Update of Tritium Transport Calculations for the Rulison Site: Report of Activities and Results During 2009-2010. DRI Letter Report prepared for Stoller Corporation, contractor to DOE Office of Legacy Management.
- Pohll, G. and J. Chapman, 2010. Value of Information Analysis Project Gnome Site, New Mexico. DRI Publication No. 45227, DOE/NV/26383-07, LMS/GNO/S04740, 39p.

- Stone, Asako, and J. Chapman, 2009. Assessment of Citizen Perceptions and Knowledge for a Groundwater Monitoring Network Design. DRI Publication No. 45231, DOE/NV/26383-12, 29p.
- Gillespie, D., B. Lyles, J. Healey, and J. Chapman, 2008. Investigation of Rapid Decrease in Water Level at MV-2 Lower Piezometer, Central Nevada Test Area. Letter Report to Stoller, DOE Office of Legacy Management, 9p.
- Chapman, J., 2008. Scoping Uncertainty Assessment for Contaminant Transport from the Gasbuggy Underground Nuclear Test Site. Letter Report to Stoller, DOE Office of Legacy Management, 23p.
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- Hassan, A.E., J.B. Chapman, and B.F. Lyles, 2008. Validation Analysis of the Shoal Flow and Transport Model. DRI Pub. No. 45225, U.S. DOE report DOE/NV/26383-05.
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- Cooper, C., M. Ye, and J. Chapman, 2007. Tritium Transport at the Rulison Site, a Nuclear-Stimulated Low-Permeability Natural Gas Reservoir. U.S. DOE Office of Legacy Management report DOE-LM/1522-2007, DOE/NV/13609-54, 102p.
- Hassan, A. and J.Chapman, 2006. Verification and Uncertainty Reduction of Amchitka Underground Nuclear Testing Models. Desert Research Institute, Division of Hydrologic Sciences Publication No. 45216, U.S. Department of Energy, Nevada Operations Office report DOE/NV/13609-46, 114p.
- Hassan, A., J.Chapman, H.Bekhit, B.Lyles, and K.Pohlmann, 2006. Validation Analysis of the Groundwater Flow and Transport Model of the Central Nevada Test Area. Desert Research Institute, Division of Hydrologic Sciences Publication No. 45221, U.S. Department of Energy, Nevada Operations Office report DOE/NV/13609-51, 74p.
- Lamorey, G., S.Bassell, R.Schumer, D.Boyle, G.Pohll, and J.Chapman, 2006. Development of a Groundwater Management Model for the Project Shoal Area. Desert Research Institute, Division of Hydrologic Sciences Publication No. 45223, U.S. Department of Energy, Nevada Operations Office report DOE/NV/13609-53, 19p.
- Lyles, B., J.Chapman, J.Healey, and D.Gillespie, 2006. Central Nevada Test Area Monitoring Report. Desert Research Institute, Division of Hydrologic Sciences Publication No. 45222, U.S. Department of Energy, Nevada Operations Office report DOE/NV/13609-52, 14p.
- Lyles, B., P.Oberlander, D.Gillespie, D.Donithan, J.Chapman, and J.Healey, 2006. Hydrologic Evaluation for Model Validation Wells MV-1, MV-2, and MV-3 Near the Project Shoal Area. Desert Research Institute, Division of Hydrologic Sciences Publication No. 45220, U.S. Department of Energy, Nevada Operations Office report DOE/NV/13609-50, 45p.

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- Boyle, D.P., G. Lamorey, S. Basssett, G. Pohll, and J. Chapman, 2005. Development and Testing of a Groundwater Management Model for the Faultless Underground Nuclear Test, Central Nevada Test Area. Desert Research Institute, Division of Hydrologic Sciences Publication No. 45212, U.S. Department of Energy, Nevada Operations Office report DOE/NV/13609-41, 24p.
- Cooper, C., M.Ye, J.Chapman, and C.Shirley, 2005. Radionuclide Migration at the Rio Blanco Site, A Nuclear-Stimulated Low-Permeability Natural Gas Reservoir. Desert Research Institute, Division of Hydrologic Sciences Publication No. 45215, U.S. Department of Energy, Nevada Operations Office report DOE/NV/13609-45, 94p.
- Pohlmann, K.F., G. Pohll, J. Chapman, A. Hassan, R. Carroll, and C. Shirley. 2004. Modeling to Support Groundwater Contaminant Boundaries for the Shoal Underground Nuclear Test. Desert Research Institute, Division of Hydrologic Sciences Publication No. 45184, U.S. Department of Energy, Nevada Operations Office report DOE/NV/13609-13, 155p.
- Lyles, B., J.Chapman and D.Gillespie, 2003. Investigations in Well EPNG 10-36 at the Gasbuggy Nuclear Test Site, Rio Arriba County, New Mexico. Desert Research Institute, Division of Hydrologic Sciences Publication No. 45202, U.S. Department of Energy, Nevada Operations Office report DOE/NV/13609-31, 16p.
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- Pohll, G., K. Pohlmann, J. Daniels, A. Hassan, and J. Chapman, 2003. Contaminant Boundary at the Faultless Underground Nuclear Test. Pub. No. 45196, DOE/NV/13609-24, 52p.
- Hassan, A., K. Pohlmann, and J. Chapman, 2002. Modeling groundwater flow and transport of radionuclides at Amchitka Island's underground nuclear tests: Milrow, Long Shot, and Cannikin. Desert Research Institute, Division of Hydrologic Sciences Publication No. 45172, DOE/NV/11508-51, 249p.
- Chapman, J., 2001. Chemical and isotopic evaluation of water Sources to the fens of South Park, Colorado. Desert Research Institute, Division of Hydrologic Sciences publication No. 41167, 24p.
- Cooper, C. and J. Chapman, 2001. Modeling approach for evaluating radionuclide transport in nuclear-stimulated gas reservoirs. Desert Research Institute, Division of Hydrologic Sciences publication No. 45186, DOE/NV/13609-15, 35p.
- Tyler, S., J. Chapman, and C. Cooper, 1999. Estimates of evaporation at the area 5 Radioactive waster management site, Nevada Test Site: Evaluation of estimates based on stable isotopes and comparison to other methods. Desert Research Institute, Water Resources Center publication No. 45169, DOE/NV/11508-46, 25p.

- Pohll, G., T. Mihevc, J. Chapman, B. Lyles and P. Reimus, 1999. Project Shoal Area: Field characterization plan, two-well tracer test deep-well characterization and monitoring. Desert Research Institute, Publication No. 45168, DOE/NV/11508--45, 55p.
- Pohlmann, K., J. Chapman, A. Hassan, and C. Papelis, 1998. Evaluation of groundwater flow and transport at the Faultless underground nuclear test, Central Nevada Test Area. Desert Research Institute, Water Resources Center publication No. 45165, DOE/NV/11508-41, 105p.
- Pohlmann, K., D. Campagna, J. Chapman, and S. Earman, 1998. Investigation of the origin of springs in the Lake Mead National Recreation Area. Desert Research Institute, Water Resources Center publication No. 41161, 51p.
- Pohll, G., J. Chapman, A. Hassan, C. Papelis, R. Andricevic, and C. Shirley, 1998. Evaluation of groundwater flow and transport at the Shoal underground nuclear test: an interim report. Desert Research Institute, Water Resources Center publication No. 45162, DOE/NV/11508-35, 123p.
- Chapman, J.B., T. Mihevc, and B. Lyles, 1996. Tritium migration at the Gasbuggy Site: Evaluation of possible hydrologic pathways. Desert Research Institute, Water Resources Center publication No. 45144, DOE/NV/11508-12, 26p.
- Chapman, J.B., S. Earman, and R. Andricevic, 1996. Assessment of Hydrologic Transport of radionuclides from the Rio Blanco underground nuclear test site, Colorado. Desert Research Institute, Water Resources Center publication No. 45151, DOE/NV/11508-19, 24p.
- Earman, S., J. Chapman, and R. Andricevic, 1996. Assessment of hydrologic transport of radionuclides from the Rulison underground nuclear test site, Colorado. Desert Research Institute, Water Resources Center publication No. 45149, DOE/NV/11508-17, 23p.
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