Professional Resume

James P. Prieur

Senior Hydrologist Southern Nevada Water Authority 100 City Parkway, Suite 700 Las Vegas, Nevada 89106 james.prieur@snwa.com (702) 862-7437

Professional Licenses and Affiliations

Professional Geologist license in Wisconsin #294 and Florida #1027 Previously registered as PG or Groundwater Professional in six other states Nevada Water Resources Association Association of Groundwater Scientists and Engineers Served on National Environmental Committee for the Consulting Engineers Council

Professional Experience

Southern Nevada Water Authority, 2006-Present, Las Vegas, NV

Senior Hydrologist, Water Resources Division, Manage Data Acquisition and Reporting Section.

Responsible for hydrologic monitoring, compliance, and reporting for Delamar, Dry Lake, and Cave Valleys and Spring Valley monitoring and mitigation plans. SNWA representative on the Department of Interior/SNWA Stipulation Agreement Hydrologic Technical Review Panel. Responsible for monitoring, permit compliance and reporting for Las Vegas Valley Artificial Recharge Program and groundwater production permits, and Jean, Searchlight, Blue Diamond, and Kyle Canyon water systems. Responsible for well performance and aquifer testing/analysis program. Coordinate USGS/ SNWA joint funding agreements for surface and groundwater monitoring in east-central Nevada and western Utah.

Self-Employed, 1998-2006

Fulfilled non-compete agreements with Delta, worked as an independent consultant on a variety of water resource and environmental related projects.

Delta Environmental Consultants, Inc., 1986-1998, St. Paul, MN

An original founder, Vice President of Technical Operations and Principal Hydrogeologist

Company grew from 5 employees to over 570 with offices throughout the United States and London.

Responsible for technical quality and troubleshooting and project review for sites located throughout the country in a wide variety of hydrogeologic conditions. Performed domestic and international water resource and environmental project work. Provided extensive technical support for western United States offices in Phoenix, Salt Lake City, Denver, Sacramento, and Seattle.

Duties included water resource and hydrogeologic investigations, client and project management, contaminant hydrogeology, groundwater flow and contaminant transport modeling, site remediation design, environmental chemistry, application of advanced remediation technology, client litigation technical support and expert testimony.

Started an office in Tampa, Florida and managed the southeast region for one year. Professional staff grew from 3 to 60 professionals. Established additional offices in Charlotte and Atlanta.

Founders sold the company to employees through an ESOP program in 1996.

Twin City Testing Corporation, 1984-1986, St. Paul, MN

Manager Hydrogeology Department

Performed project management, hydrogeologic investigation and site remediation activities on a variety of largescale projects involving water supply, solvent, hydrocarbon, PCB, PAH, dioxin and metal contaminants. Performed and evaluated groundwater flow modeling and geochemical evaluations.

NUS Corporation (Haliburton Subsidiary), 1982-1984, Pittsburgh, PA and San Juan, Puerto Rico

Project Hydrogeologist for the eastern zone USEPA Superfund program contract.

Performed hydrogeologic and municipal well field contamination investigations in the U.S. and Puerto Rico. Worked in carbonate and karst hydrogeologic environments.

Earth Sciences Consultants, 1982, Pittsburgh, PA

Project Hydrogeologist

Performed water resource impact evaluations associated with coal mining dewatering and hazardous waste disposal facilities.

Argonne National Laboratory, 1980, Chicago, IL

Research Associate

Prepared study on feasibility of wastewater reinfiltration and reinjection for aquifer recharge and impact on water supplies.

Illinois Department of Public Health, 1979-1980, Chicago, IL

Environmental Health Professional

Inspected and evaluated water supply systems for the Safe Drinking Water Program. Investigated complaints associated with private well contamination and well drillers.

Education

M.S. Water Resources Management/Hydrogeology University of Wisconsin-Madison-1982

(Advisor Mary Anderson)

Coursework included advanced hydrogeology, hydrogeologic field methods, geophysical applications in hydrogeology, hydrology, field hydrology, small watershed hydrology, soil mechanics, physiochemical soil properties, advanced water chemistry, soil chemistry, and limnology,

B.S. Environmental Geology/Chemistry University of Illinois-Chicago-1979 (Advisor Kelvin Rodolfo)

Water and environmental related courses in hydrogeology, geology, chemistry, civil engineering, and public health. State of Illinois Governor's Fellow-1979

Additional graduate study in chemical analysis methods.

Management training seminars, Levinson Institute, Bedford, MA

Selected Technical Short courses:

- Advanced groundwater modeling (Thomas Prickett)
- Fracture flow analysis (Shlomo Neuman)
- Water supply development and management (Fletcher Driscoll)
- Groundwater analytical element modeling (Otto Strack)

Studied Spanish in Buenos Aires and Quito

Selected Representative Domestic Experience

Performed expert testimony, deposition, and direct technical support on eight environmental and water supply litigation projects. Projects included individual and class action litigation related to impacts to structures, health, municipal well fields, private wells, and property. Several projects included allocation of relative contaminant contribution of different sites as well as multiple operators of the same site over different insurance coverage periods. One project included in-court technical assistance to the attorneys throughout the trial.

Performed water resource evaluations at a large number of sites including aquifer testing, well head protection evaluation and modeling, well field performance evaluation, modeling, and water well design and installation.

Performed, managed or reviewed hundreds of hydrocarbon or solvent related soil and groundwater contamination and remediation projects for government and the petroleum, insurance, pipeline, and transportation industries. Projects included contaminated private wells and municipal well fields, explosive vapors in utilities/structures, and complex multiple source contribution determinations. Projects used a wide range of traditional and innovative technologies for investigations and remediation. Projects required regulatory negotiations and public meeting presentations. Projects were located throughout the United States in varying hydrogeologic conditions.

Managed and performed hydrogeologic investigation and site remediation at the University of Minnesota, Rosemount Research Center. Project included solvent, PCB, lead, and dioxin contamination. The solvent plume extended several miles offsite in a fractured carbonate aquifer and impacted over 25 private wells. Remediation included an alternative water supply system and extensive soil and groundwater treatment.

Managed and performed a remedial investigation at a pole treating superfund facility in New Brighton, MN. Site contaminants included pentachlorophenol, CCA, and creosote. Project included drum sampling and repackaging and allocation of contribution from previous site operators and an adjacent pole treating facility.

Managed and performed a regional hydrogeologic investigation and groundwater remediation of extensive solvent contamination at a manufacturing facility located in Hudson, WI. The site is located in an area of fractured dolomite and limestone with extensive bedrock valleys. Project involved contamination of multiple site and private water supply wells. Investigation included a regional seismic geophysical survey, installation of deep monitoring wells, and aquifer testing. Remediation included on site soil remediation, design and installation of alternative water supply systems, activated carbon treatment of other private wells, and installation of a high capacity contaminant recovery well.

Performed a wide range of projects for the class I railroad industry including Burlington Northern and Canadian Pacific railroads. Developed a system wide environmental management program for thousands of leased properties, environmental awareness training program, air permitting, and derailment support and soil/groundwater remediation. Managed permitting, implementation, and operation of a large-scale high capacity bioremediation project at a former refueling facility impacting a three square block residential area. Performed remedial investigation of pentachlorophenol and creosote impacts at a railroad tie treatment facility.

Performed numerous environmental impact evaluations and assessments for development projects, mining operations, industrial facilities, and petroleum pipeline/distribution operations located throughout the United States.

Performed a comprehensive remedial investigation at an abandoned chemical manufacturing facility, Drake Chemical, located in Lockhaven, PA. The superfund site had produced a wide range of dyes, solvents, pesticides, and acids. The investigation included geophysical surveys, building, and surface water sampling, surficial and and bedrock aquifer hydrogeologic investigation and aquatic surveys. Some work was performed at Level B protection. Investigation also included the determination of contribution from an adjacent chemical manufacturing facility.

Prepared a Part B RCRA permit application and performed hydrogeologic investigations at two steel pickle liquor disposal sites in Bulger and Washington Counties, PA. The investigation included well design and installation through abandoned underground coal mine workings.

Selected Representative International Experience

Environmental and water resource assessment of multiple chemical manufacturing facilities. Project included soil, surface water and groundwater sampling and evaluation, water supply source assessment, and evaluation of impacts from adjacent facilities. (Lima, Peru and Guayaquil, Equador)

As an USEPA Superfund contractor, ran a field office investigating regional solvent contamination of eight municipal water supply wells. The site is located in a highly karst area. Investigation included deep monitoring well installation, extensive downhole geophysical analysis, tracer studies, large-scale pumping tests for regional aquifer evaluation, numerical groundwater flow model development, and multiple source identification/evaluation. (Vega Alta, Puerto Rico)

Performed a superfun site evaluation and remedial investigation at an abandoned thermometer manufacturing facility landfill site which contained mercury waste. The site was located on dioritic-based bedrock. (Junco, Puerto Rico)

Performed a hydrogeologic investigation at a pharmaceutical disposal facility in extensive karst environment (Barceloneta, Puerto Rico)

Regional surface and groundwater quality impact evaluation in the Lake Chad region. Volunteered for a study of the hydrogeochemistry of local water supplies to determine interrelationships with Lake Chad and identify regional aquifer systems. (Kano, Nigeria)

Environmental impact study in Iquitos, Ecuador. Volunteered for an extended baseline study of biological impacts from rainforest development.

Presenter and professional exchange – International Groundwater and Environmental Symposium – Beijing, China. Met with senior environmental regulatory officials and toured multiple sites impacted by environmental contamination, subsidence from aquifer over pumping and water supply issues.

Technical Litigation Support & Expert Testimony Experience

Lacrosse, Wisconsin – Provided litigation support, deposition, court testimony, and public meeting presentations for Burlington Northern Railroad in a class action suit involving an extensive locomotive refueling facility diesel fuel release. The diesel plume covered a three-square block residential area seeping into residential basements. (1996)

Danville, Virginia – Provided expert testimony and technical consulting for Federated Insurance Company in litigation involving hydrocarbon contamination of water supply wells and property devaluation. (1994)

Apex, North Carolina – Provided technical consulting, deposition review, and advisory support for Federated Insurance Company litigation involving the determination of relative contribution of soil and groundwater contamination from two adjacent bulk petrochemical facilities operated by multiple companies at various times. Determined contaminant contribution from sites during different coverage time periods. (1993)

Grassemere, Alabama – Provided technical consulting and depositions for Federated Insurance Company involving the hydrocarbon contamination of two water wells and property devaluation. (1992)

Fort Collins, Colorado – Provided consulting and expert testimony for Federated Insurance Company. Provided expert technical advisory support for attorneys in court throughout proceedings. Royal Petroleum class action litigation involved 40 plaintiffs and multiple defendants associated with groundwater contamination, hydrocarbon vapor migration into private residences, property devaluation, and health effects. (1991)

Belleview, Florida – Technical consulting and expert deposition review for Federated Insurance Company involved in litigation involving hydrocarbon contamination of two municipal water supply wells with multiple defendants. Provided technical advice during settlement negotiation hearings. (1987)

Winchester, Tennessee – Technical consulting for Federated Insurance Company involved in litigation involving health effects from hydrocarbon contamination of a private well. (1986)

Minneapolis, Minnesota – Provided expert testimony and technical consulting for U.S. Steel in litigation involving water well contamination from fertilizers. (1985)

Recent Reports, Publications, and Presentations

Aquifer-test analysis case studies in east-central Nevada utilizing geophysical methods to assist in data evaluation and identification of boundary conditions. Presentation at Nevada Water Resources Conference, February 2010.

Overview and current status of the SNWA hydrologic monitoring and aquifer testing program in east-central Nevada and western Utah. Presentation at Nevada Water Resources Conference, February 2009.

Kistinger, G.M., Prieur, J.P., Rowley, P.D., and Dixon, G.L., 2009, Characterization of streams and springs in the Snake Valley area, Utah and Nevada, *in*Tripp, B.T., Krahulec, K., and Jordan, J.L., eds, Geology and geologic resources and issues of western Utah: Utah Geological Association Publication 38, p. 299-324.

Southern Nevada Water Authority, 2010, 2009 Spring Valley hydrologic monitoring and mitigation plan status and data report: Southern Nevada Water Authority, Las Vegas, Nevada, Doc. No. WRD-ED-0007, 120 p.

Southern Nevada Water Authority, 2010, 2009 Delamar, Dry Lake, and Cave Valleys hydrologic monitoring and mitigation plan status and data report: Southern Nevada Water Authority, Las Vegas, Nevada, Doc. No. WRD-ED-0008, 117 p.

Las Vegas Valley Water District, 2010, 2009 Artificial recharge annual report – Nevada Division of Water Resources Permit Nos. R-001, R-003, and R-012 Nevada Division of Environmental Protection Permit UIC No. UNEV87054: Las Vegas Valley Water District, Las Vegas, Nevada, Doc. No. LVVWD-ED-0004, 163 p.

Prieur, J.P., Acheampong, S.Y., and Ashinhurst, C.S., 2010, Hydrologic data analysis report for Test Well SPR7007X in Spring Valley Hydrographic Area 184: Southern Nevada Water Authority, Las Vegas, Nevada, Doc. No. DAR-ED-0005, 76 p.

Prieur, J.P., Farnham, I.M., and Ashinhurst, C.S., 2010, Hydrologic data analysis report for Test Well 184W101 in Spring Valley Hydrographic Area 184: Southern Nevada Water Authority, Las Vegas, Nevada, Doc. No. DAR-ED-0003, 78 p.

Prieur, J.P., Farnham, I.M., and Ashinhurst, C.S., 2010, Hydrologic data analysis report for Test Well 184W103 in Spring Valley: Southern Nevada Water Authority, Las Vegas, Nevada, Doc. No. DAR-ED-0004, 79 p.

Prieur, J.P., Farnham, I.M., and Fryer, W., 2009, Hydrologic data analysis report for Test Well 184W105 in Spring Valley: Southern Nevada Water Authority, Las Vegas, Nevada, Doc. No. DAR-ED-0002, 81 p.

Southern Nevada Water Authority, 2009, Delamar, Dry Lake, and Cave valleys stipulation agreement hydrologic monitoring plan status and historical data report: Southern Nevada Water Authority, Las Vegas, Nevada, Doc. No. WRD-ED-0005, 162 p.

Southern Nevada Water Authority, 2009, Spring Valley hydrologic monitoring and mitigation plan (Hydrographic Area 184): Southern Nevada Water Authority, Las Vegas, Nevada, Doc. No. WRD-ED-0003, 49 p.

Southern Nevada Water Authority, 2009, 2008 Spring Valley hydrologic monitoring and mitigation plan status and data report: Southern Nevada Water Authority, Las Vegas, Nevada, Doc. No. WRD-ED-0004. 109 p.

Southern Nevada Water Authority, 2009, Hydrologic monitoring and mitigation plan for Delamar, Dry Lake, and Cave valleys: Southern Nevada Water Authority, Las Vegas, Nevada, Doc. No. WRD-ED-0006, 38 p.

Las Vegas Valley Water District, 2009, 2008 Artificial recharge annual report – Nevada Division of Water Resources Permit Nos. R-001, R-003, and R-012 Nevada Division of Environmental Protection Permit UIC No. NEV 87054: Las Vegas Valley Water District, Las Vegas, Nevada, Doc No. LVVWD-ED-0002, 169 p.

Southern Nevada Water Authority, 2008, Delamar, Dry Lake, and Cave Valley stipulation agreement hydrologic monitoring plan status and data report: Southern Nevada Water Authority, Las Vegas, Nevada, Doc. No. WRD-ED-0002, 31 p.

Southern Nevada Water Authority, 2008, Spring Valley stipulation agreement hydrologic monitoring plan status and data report: Southern Nevada Water Authority, Las Vegas, Nevada, Doc. No. WRD-ED-0001, 76 p.

Selected Additional Papers, Publications, and Presentations

Prieur, J.P., 1994, "Remediation of Contaminated Aquifers: General and Specific Considerations". Chapter 35, Groundwater Contamination and Control, Edited by Uri Zoller, Marcel Dekker. 712p.

Martinson, M., and J.P. Prieur, 1996, "Regulatory Permitting for In Situ Bioremediation Treatment: Case History of Burlington Northern Sante Fe Railroad High Capacity Bioremediation Project" Conference Proceedings on Contaminated Soils, Amhurst, MA.

Prieur J.P., 1993, "Practical Application of Innovative Groundwater and Soil Remediation Technologies" International Groundwater and Environment Symposium. Beijing, China.

Guidance for Design, Installation and Operation of Groundwater Extraction and Product Recovery Systems. Wisconsin DNR PUB-RR-183. Reviewer.

Fulton, J. and J.P. Prieur, 1988 "Three Dimensional Groundwater Flow Model for Evaluation of Recovery Trench Performance" Petroleum Hydrocarbons and Organic Chemicals in Groundwater Conference Proceedings. Houston, TX.

Prieur, J.P., 1985, Aquifer Testing Considerations at Large Scale Contaminated Sites. Association of Enigeering Geologist Conference Proceedings Charlotte, North Carolina.

Prieur, J.P. 1985, "Vertical Groundwater Quality Profiling Techniques" Industrial and Municipal Waste Conference Proceedings. Madison, WI.

Nazar, A. and J.P. Prieur, 1982, "Field Evaluation of Multi-Level Sampling Methodologies at Drake Chemical Superfund Site in Lockhaven, PA" Groundwater Monitoring Review.