

Steve Reed, P.G.

Principal Scientist | Environmental and Earth Sciences
Bellevue
+1-425-519-8741 | sreed@exponent.com

Professional Profile

Mr. Reed has 34 years experience in the environmental and groundwater resource consulting arena, serving in both technical and senior management roles. He has performed hydrogeologic studies throughout the United States. He has performed projects under a wide variety of environmental regulatory programs including RCRA, CERCLA and TSCA. Mr. Reed provides litigation support and expert testimony, as well as regulatory agency negotiations. He has testified in cases before both state and federal courts, before several state agencies and has been involved in negotiations with numerous state agencies and several EPA regions.

Academic Credentials & Professional Honors

M.S., Geology, Northern Arizona University, 1976

B.S., Geology, Northern Arizona University, 1970

Prior Experience

Senior Vice President, Senior Advisor, ARCADIS, 1975–2009

Geologist, U.S. Geological Survey, Branch of Astrogeology, 1967–1975

Professional Affiliations

Geological Society of America

National Ground Water Association

Publications

Batson RM, Larson KB, Reed VS, Sutton RL, Tyner RL. Apollo 16 lunar surface photography in Apollo 16 final report. U.S. Geological Survey Professional Paper, 1982.

Reed VS. Geology of South Ray and Baby Ray Craters, Apollo 16 in Apollo 16 Final Report. U.S. Geological Survey Professional Paper, 1982.

Reed EL, Reed VS. Disposal well design for in situ uranium operations. Proceedings, South Texas Uranium In Situ Seminar by Society of Mining Engineers of AIME, 1980.

Reed VS. Stratigraphy and depositional environment of the Hakatai Shale, Grand Canyon, Arizona. Master's Thesis, Northern Arizona University, Flagstaff, AZ, 1976.

Reed VS, Wolfe EW. Origin of the Taurus Littrow Massifs. Proceedings, 6th Lunar Science Conference, Geochim. et Cosmochim. Acta 1975; 3(6):2443-2462.

Reed, Steve V. Stratigraphy of the Hakatai Shale, Grand Canyon, Arizona (abs). Proceedings, Geological Society of America 1974; 6(5):469.

Beus SS, Rawson RR, Dalton RO, Stevenson GM, Reed VS, Daneker TM. Preliminary report on the Unkar Group (Precambrian) in Grand Canyon, Arizona. Karlstrom TNV, Swann GA, and Eastwood RL, (eds), Geology of Northern Arizona, Part I, pp. 34-53, 1974.

Swann GA, Reed VS. A method for estimating the absolute ages of small Copernican craters and the application to the determination of copernican meteorite flux. Proceedings, 5th Lunar Science Conference, Geochim. et Cosmochim. Acta 1974; 1(5): 151-158.

Wolfe EW, Reed VS. Geologic setting of the South Massif, Apollo 17 site. Interdisciplinary studies of samples from Boulder 1, Station 2, Apollo 17. Vol. 2, Sec. I, Smithsonian Astrophysical Observatory, Cambridge, MA 1974.

Larson KB, Batson RM, Reed VS, Wolfe EW. Preliminary catalog of pictures taken on the lunar surface during the Apollo 17 mission. U.S. Geological Survey Report: Astrogeology 1973; 70.

Muehlberger WR, Batson RM, Cernan EA, Freeman VL, Hait MH, Holt HE, Howard KA, Jackson ED, Larson KB, Reed VS, Rennilson JJ, Schmitt HH, Scott DH, Sutton RL, Stuart-Alexander D, Swann GA, Trask NJ, Ulrich GE, Wilshire HG, Wolfe EW. Preliminary geologic analysis of the Apollo 17 site. Apollo 17 Preliminary Science Report: NASA SP 330; 1973; 6-1-6-91.

Muehlberger WR, Batson RM, Cernan EA, Freeman VL, Hait MH, Holt HE, Howard KA, Jackson ED, Larson KB, Reed VS, Rennilson JJ, Schmitt HH, Scott DH, Sutton RL, Stuart-Alexander D, Swann GA, Trask NJ, Ulrich GE, Wilshire HG, Wolfe EW. Preliminary geologic analysis of the Apollo 17 site. U.S. Geological Survey Report: Astrogeology 1973; 72.

Muehlberger WR, Batson RM, Boudette EL, C.M. Duke, Eggleton RE, Elston, England AW, Freeman VL, Hait MH, Hall TA, Head JW, Hodges CA, Holt HE, Jackson ED, Jordan JA, Larson KB, Milton DJ, Reed VS, Rennilson JJ, Schaber GG, Schafer JP, Silver LT, Stuart-Alexander D, Sutton RL, Swann GA, Tyner RL, Ulrich GE, Wilshire HG, Wolfe EW, Young JW. Preliminary geologic investigation of the Apollo 16 Landing Site. Apollo 16 Preliminary Science Report, NASA SP 315, 1973.

Sutton RL, Hait MH, Larson KB, Swann GA, Reed VS, Schaber GG. Documentation of Apollo 15 Samples. U.S.G.S. Interagency Report: Astrogeology 1972; 47.

Batson RM, Larson KB, Reed VS, Tyner RL. Preliminary catalog of pictures taken on the lunar surface during the Apollo 16 mission. U.S. Geological Survey Report: Astrogeology 1972; 50.

Batson RM, Larson KB, Reed VS, Rennilson JJ, Sutton RL, Tyner RL, Ulrich GE, Wolfe EW. Preliminary catalog of pictures taken on the lunar surface during the Apollo 15 mission. U.S. Geological Survey Interagency Report 1971; 35.

Project Experience

Mining Participated in several surface and underground mining projects, including dewatering studies for underground mines, tailing pond investigations and permitting, including investigation and testimony in contested Part B hearings. **TSCA** Performed site investigations involving suspected or known PCB contamination. Designed and implemented PCB remediation programs and testified in state court

concerning PCB remediation costs. Evaluated occurrence, source, and remediation of PCB contamination on an industrial site.

Landfills Performed studies on municipal and industrial landfills including CKD disposal sites, some of which involved litigation, to determine the actual or potential impact on surface and ground waters. Provided technical support for landfill closure design. Involved in a study to determine the feasibility of various reuse scenarios for a closed municipal landfill. **Water Resources Evaluations/Development** Evaluated groundwater resources for municipalities and private concerns. Assessed reservoir performance, obtained water rights and designed and constructed municipal well fields. Estimated reserves, safe yields and well efficiencies for both municipal and private clients. **Environmental Permitting** Prepared applications for Part B RCRA permits, and Class I and Class III injection permits. Successfully permitted several in situ uranium operations and the only in situ sodium sulfate mine in the United States. Testified before state agencies in support of permit applications. **In Situ Mining Projects** Evaluated and designed several in situ mining projects, including reservoir studies, and extraction well system design and construction. Supplied expert testimony for several permit applications. **Deep Well Injection** Performed siting studies, and designed, permitted, and constructed Class I disposal wells. Disposal well projects have included both industrial and commercial facilities. Designed and supervised mechanical integrity tests and well rehabilitation programs, and evaluated the performance and feasibility of Class II disposal wells.