

## R. Glenn Vawter

Cellular: 970-389-0879

Email: atpv@comcast.net

### EDUCATION and HONORS

B.S. Petroleum Engineering, 1960, Colorado School of Mines

Advanced Management Program, 1976, Harvard Business School

Sigma Gamma Epsilon (Honorary Earth Sciences)

Professional Engineer, State of Colorado, No. 6314 (by examination)

Past Professional Engineer, State of Utah

U.S. Army Corp of Engineers, Captain, Reserve, 1961-1969

### PROFESSIONAL AFFILIATIONS

Member, Society of Petroleum Engineers

Member, American Institute of Chemical Engineers

Member, Energy Committee, Western Colorado Club 20

Current Executive Director, National Oil Shale Association

Past Member, Synthetic Fuels Committee - American Petroleum Institute

Past Member, Oil Shale Research Advisory Board - Colorado School of Mines

Past Member, Colorado School of Mines Alumni Association Board

Past Chairman, Rocky Mountain Oil & Gas Association, Oil Shale Committee

Past Member and committee chairman, Institute for Nuclear Materials Management

Past Member, American Nuclear Society

### SUMMARY OF EXPERIENCE

- 2001 – Present      **President** of ATP Services, LLC, providing consulting services to government contractors, energy companies, and oil shale developers. Conducts engineering work, serves as an expert witness, provides government/public affairs advice, and manages an industry based non-profit advocacy association.
- 2007 - 2014 - Managed the National Oil Shale Association as its Executive Director
- 2005 – 2009 - Prepared proposal for two energy firms seeking BLM oil shale R,D&D Leases in Colorado and Utah. Colorado lease was awarded and is still active. Awarded patents on an insitu retorting technology.
- 2002 – 2003 - Assisted an investment banking firm with economic analysis and due diligence work for a loan to an Australian Oil Shale project.
- 2001 – 2002 - Provided technical and management advice to clients bidding on DOE nuclear waste related solicitations.
- 2001 – 2009 - Provided expert witness services to legal firms representing oil shale firms in support of State of Colorado water rights diligence proceedings.
- 1991 - 2001      **Manager** for a subsidiary of TRW, Inc. the Management and Operating Contractor for a U.S. government nuclear waste management program. Served as Deputy Assistant General Manager responsible for the design of nuclear waste disposal facilities. Supervised subcontractor employees from Fluor, Duke Energy, Kiewit and National Laboratories. Responsibilities included overseeing the boring of a 35-foot diameter five mile long tunnel at the Yucca Mountain Nuclear Waste Project in Nevada.

- 1989 - 1991 **Consultant** providing governmental affairs, technology, project management and marketing services to industry and government. Principal clients included a major energy company and a foreign government. Provided information to and interacted with congressional staff with regard to energy appropriation issues. Served as an expert on an energy panel for the King of Morocco and advised a contractor to U.S.A.I.D.
- 1982 - 1989 **President and CEO** of Leesburg Land and Mining Company engaged in the mining and recovery of gold in Idaho. Hired the engineers that designed the mine and mill. Supervised start-up and operation of the facilities. Obtained permits and interacted with state and local officials.
- Technology Development Division Director** at Western Research Institute (WRI) in Laramie, Wyoming where supervised applied energy research and development activities. Then promoted to Vice President Business Development and set up an office in Washington, D.C.
- Management Consultant** providing government liaison, technical and management services to oil shale companies including Peter Kiewit, the Kingdom of Morocco, and Occidental Petroleum. Managed the opening of an oil shale mine at Timhadit, Morocco. Served on a team that conducted oil shale combustion and modified insitu retorting tests for Occidental. Worked on near surface insitu technology development for Peter Kiewit on the Seep Ridge Project in Utah. Prepared proposals to USDOE and the Synthetic Fuels Corporation.
- 1964 – 1982 **Project Engineer to Senior Vice President** for Tosco Corporation a Fortune 150 firm. Served as engineering, maintenance and operations manager for the Colony semi-works oil shale mine and retorting facility. Later became president of Tosco's technology development subsidiary and was responsible for the design, commercialization and licensing of mining and processing technology. Had overall responsibility for two commercial oil shale projects that involved underground mining and above ground processing facilities. Served as senior design/construction executive for Tosco on the Colony joint venture project with Exxon Corporation. Became conversant with the technical aspects of the refining of petroleum and upgrading of shale oil. Served in management positions at two oil refineries acquired by Tosco. Reviewed shale oil upgrading tests by technology firms such as UOP and Unocal.
- 1960 – 1964 **Field Engineer** for Marathon Oil Company (then Ohio Oil Company). Served as field petroleum production and gas plant engineer at the South Coles Levee field in California.

## **STRENGTHS**

Mr. Vawter's major strengths come from his diversified technical, professional, management and public affairs experience in the energy business. He has a pragmatic approach to problem solving. He has held management and executive positions, but started in the field getting his hands dirty in oil fields, gas plants, mines and mills. By doing so he knows what it takes to get a job done in the field while at the same time seeing the big picture.

Mr. Vawter is an experienced management and technical consultant. His past experience has focused on the oil shale, fossil and nuclear energy sectors. He has a technical background in conventional and unconventional energy development including projects involving coal, oil shale, and petroleum. He has a background in petroleum exploration, production, refining, and marketing. His mining experience includes leading a precious metals mining and milling project in Idaho and overseeing the boring of a tunnel at the Yucca Mountain Nuclear Waste Project in Nevada. He has prepared proposals for companies seeking government contracts and

leases, and has performed detailed technical analyses. He has written and presented numerous technical and policy papers on all these subjects, and holds patents on several oil shale innovations. He has had experience in dealing with government at all levels, domestic and foreign, and has travelled extensively to countries with oil shale resources as a technology licensing representative.

Mr. Vawter's experience with oil shale technology began with his work as a project engineer on a small Tosco II oil shale pilot plant. The data from that plant was used to design, build and operated an 800-barrel per day Colony semi-works demonstration scale plant. The design of a 50,000 barrel per day commercial plant was completed using the data from the semi-works plant, underground mine, ore preparation and spent shale disposal operations. Mr. Vawter participated in all phases of the Colony project including supervising operations of the experimental plants, overseeing the design activities of engineering contractors, carrying out engineering studies, preparing environmental reports, performing cost estimates and developing economic analyses. Later in his career he participated as a technical and management consultant for projects planning to use insitu and modified insitu technologies in Colorado and Utah.

Proposal preparation is a key strength. Mr. Vawter has prepared proposals that have resulted in the granting of government research contracts and U.S. Bureau of Land Management (BLM) oil shale leases. The key is to condense, consolidate, illustrate, and present information from the proposal team, and from external sources, to create a credible document that meets all the requester's requirements.