GUY WILSON

865-335-9512

http://www.dynematics.com/ guywilson865@gmail.com

Highlights

- Very Experienced in—
  - Transport modeling and pathways analysis
  - Risk and hazards mitigation in extreme danger environments
  - Regulatory compliance, licensing, and permitting
- *Recently updated* geosciences and upstream petro studies

Education

- M.S., Environmental Engineering, Mississippi State University, 1985
- B.S., Louisiana State University

Relevant Graduate Courses

- Petroleum Geology
- Geophysical Well Logging
- Stream and Estuarine Analysis
- Groundwater Hydrology
- Groundwater Resources Evaluation
- Statistics
- Environmental Radioactivity
- Disposal of Radioactive Wastes
- Physicochemical Operations and Processes
- Biological Operations and Processes
- Graduate research in risk analysis. Included mathematical model derivation and software development (*cross disciplinary research* with half of graduate committee from nuclear engineering department).

Objective

Facilitating your successful growth and excellent performance through my self-motivated energy, pride in workmanship, powerful digital, people, technical, and business development skills, commitment to quality, and my adaptable personality.

Relevant Experience

Consultant 10/1991 to Present

Environmental Engineering and Hazardous Materials Operations Safety and Permitting Support via a variety of subcontracts, exceeding full time billing for over 20 years. Sold my consulting services for the past ten years at over full time.

- Manager of Environment, Safety, and Heath for successful hazardous waste chemical treatment plant startup. Lead role in obtaining radioactive material license for mixed waste and key support role in obtaining RCRA Part B permit for metals and organics.
- Estimated worker exposures and discharge concentrations and planned emergency responses for catastrophic accidents and hypothetical chemical and radioactive liquid and airborne releases.
- Modeled potential toxic gas and airborne releases in hypothetical accident scenarios for several sites using a wide variety of mass transport models.
- Evaluated uranium assay of defueled salts through an innovative approach combining gamma spectroscopy, gamma profiling, and Fourier transform infrared spectrometry data. Planned and oversaw the successful gamma data acquisition in an extreme radiation field.
- Planned and oversaw the safe successful repair of a very large pure sodium tank and relocation of 10 to 15 ton. sodium tanks stored directly over water after a rupture resulted in evacuation of local residents.
- Managed a team of engineers successfully obtaining six DOT Special Permits used for the largest single uranium hexafluoride shipping campaign in US history.
- Prepared the safety analysis for a new overpack packaging in 2006 based on actual diesel pool fire testing as well as numerical solutions models and updated the safety analysis in 2011.
- Set up and implemented a new comprehensive corporate OSHA safety and radiation safety program.
- Interfaced with regulatory agencies including EPA, NRC, DOE, DOT, FEMA, and several state agencies for permitting and regulatory compliance issues.
- Planned, budgeted, and managed the successful preparation, packaging, and highway transportation of (1) highly enriched uranium molybdenum alloy metal nuclear reactor fuel from four fast burst reactors, (2) shipments of contaminated hazardous waste treatment equipment relocated between plants, (3) highly enriched fissile nuclear weapons components, (4) contaminated gas centrifuges, and (5) a variety of other hazardous chemical or radioactive packages, all transported in commerce without a single incident.

Trainer and Presenter--Examples

- Taught health and safety worker classroom training courses
- Gave regulatory compliance college undergraduate guest lectures
- Gave televised Interview on subsurface radioactive waste disposal
- Gave hazardous material transportation presentation at Sellafield, England (National Lab in the UK, by paid invitation)

2011 and 2012 Continuing Education, Short Courses, and Updates

PetroEd Courses

- Horizontal Drilling
- Bit Hydraulics
- NORM in the Petroleum Industry
- Well Control Fundamentals
- Kick Detection
- Perforating Fundamentals
- Primary Cementing of Wells
- Hydrogen Sulfide in Production Ops
- Subsurface Safety Valves
- Reservoir Engineering Primer
- Crane Safety

Video & Independent Reading & Classroom Updates

- Petroleum Geology lectures (TUDelft via iUniversity video classes).
- Petroleum Geoscience (Gluyas and Swarbrick, reading)
- Well Logging Update (Evenick,).

Current Memberships

- Society of Petroleum Engineers

Relevant Pregraduation Highlights (< 1986)

- Developed software for re-evaluation of wireline well logging data from more than a dozen logging tools based on standard industry algorithms.
- Critically reviewed finite element transport model application in a MS Interior Salt Basin piercement dome environment.
- Evaluated well core samples by microscopic thin sections from Mississippi oil and gas well cores.
- Developed a variety of engineering design support software applications.

Frit Environmental, Inc. 8/1990 to 10/1991
Consultant and Chief Operating Officer

- Lead a team of geologists and engineers performing site assessments and remediation on underground storage tank leak sites and remediation of groundwater plumes and soil contaminated with gasoline and diesel.
- Managed a small EPA-certified environmental laboratory and implemented quality assurance and quality control measures.

INS Corporation 2/1986 to 7/1990
Manager of Health Physics and Engineering

- Performed extensive radiological risk assessments for the industrial insurer involving contaminant pathways into the soil, surface water, and groundwater.
- Responsible for OSHA safety and regulatory compliance for 13 licensed radiological facilities in 11 states.
- Managed R&D of new radiation detection instrumentation and new surfactant applications.
- Obtained all required licenses and permits in record time and contributed to the design, construction, economic risk forecasting, and timely startup of two new plants with record first year returns on investment.
- Researched ion-selective adsorption chemistry and the effect of surfactants on cation exchange media.
- Tested an array of polymeric flocculants on wastewaters and examined effect on dewatering sludges.
- Corporate Radiation Safety Officer for more than 600 radiological workers.