

Cliff Giffen

Project Scientist

FIELD OF EXPERTISE

Natural Resource Management, Civil and Mining Construction, Landfill Quality Assurance, Environmental Sampling

HIGHLIGHTS OF EXPERIENCE

Mr. Giffen has over 30 years experience in resource management in Colorado, Oregon and Utah focusing on grazing management, restoration and development of natural habitat for livestock and wildlife, managing oil and gas leases, highway and airport runway construction projects, and uranium mill tailings remediation projects. His experience also includes quality assurance monitoring on landfill gas recovery system, and soil and groundwater sampling associated with site characterization and remedial action projects.

Mr. Giffen's project experience includes the following:

- Quality assurance monitoring for a landfill methane gas recovery system. Oversight of drilling and construction of recovery wells, and the installation of pipeline gathering system.
- Assistance with soil and groundwater sampling, soil borings and monitoring well installation.
- Collection of background and historical information, site observations, and report preparation for Phase I Environmental Site Assessments.
- In-situ bioremediation design and implementation for groundwater impacted with petroleum hydrocarbons.
- Topographic and plot plan mapping, and boundary identification using traditional surveying instrumentation and global positioning systems (GPS).
- Computer design and drawing using AutoCadd 2000.
- Natural Resource Management for the Bureau of Land Management & U.S. Forest Service (Durango & Dolores, CO and Burns, OR).
- Heavy equipment maintenance at Uranium Mill Tailings Remediation Action for EPA Superfund Site in Slickrock Colorado.
- Heavy equipment maintenance for interstate highway construction projects (I70, I76 interchange) in Denver Colorado.
- Runway construction at the Albuquerque and Denver International Airports.

EDUCATION

Bachelor of Science – Range and Forest Management, Colorado State University

CERTIFICATIONS

Health and Safety Training: 40 hour Hazardous Waste Operations (OSHA 1910.120)

Health and Safety Training: 24 hour Hazardous Waste Operations

Radiological Worker II training – U.S. Dept. of Energy