

## **Resurrecting the Canyon Uranium Mine and the Pros & Cons of Sinking Shaft In-House**

The Canyon mine is a breccia pipe uranium deposit located in the Arizona Strip District in northern Arizona. The Canyon ore deposit was drilled out in the early 1980's and the surface infrastructure was completed in 1987 by Energy Fuels Nuclear Inc. who later that year placed the mine on care and maintenance due to a District Court injunction and subsequently a drop in the uranium market. Energy Fuels Resources acquired the Canyon mine at the end of June 2012. The primary deposit lies 1,100 feet below the surface and extends to a depth of 1,400' and is accessed by a recently sunk three compartment rectangular shaft. Additional uranium mineralization is known to exist below the 1,400' depth but continues to require further evaluation.

This paper will discuss the journey undertaken by Energy Fuels as the mine transitioned back from extended periods of care and maintenance to rehabilitation of the surface facilities and initial "in-house" shaft sinking. Due to numerous issues encountered with the equipment and with sinking shaft in the initial Phase the operation was suspended at a depth of 278 feet. Finally, after an additional period of care and maintenance shaft sinking operations resumed in the fall of 2015 and the shaft depth as of this talk is at 1,470 feet, the intended depth for now. This talk discusses the issues of resurrecting an old conventional mine and getting 30 year old equipment updated to meet current regulations and to run in a safe and efficient manner. It will also look at the pros and cons of sinking a conventional shaft "in-house" and the actual statistics and costs to-date. It will also discuss numerous issues that have been encountered along the way and the steps taken to resolve them and continue operations.