Surface Sampling Breccia Pipe Uranium Mineralization Resource Assessment Method, DIR Exploration, Inc.
April 8, 2010

Executive Summary

DIR has successfully researched, developed, and tested a geochemical technology that permits pre-drilling estimation of the magnitude of uranium resources present in Arizona collapse breccia pipes by sampling and measuring the weak, pipe-related mineralization in the rocks above and surrounding mineralized breccia pipes. The orientation study test cases used to research and develop the DIR method included the Hermit, Arizona-1, Pinenut, Kanab North, Pigeon, and Hacks 2 and 3 Mines. The DIR breccia pipe uranium resource assessment procedure works well on both surface-penetrating and buried (or hidden) pipes. Among other things, the accuracy and reliability of the method is sufficient, DIR believes, to serve as an early, rapid, and low-impact method of validating breccia pipe lode mining claims located on northern Arizona federal lands administered by the BLM and USFS.

The key to understanding the DIR breccia pipe evaluation technique lies in the vertical metal zoning present in breccia pipe ore bodies. This vertical zoning clearly proves that mineralizing fluids in Arizona breccia pipes moved in an upward direction, a basic fact which explains the presence and character of the weak mineralization found at the surface above and around economically-mineralized pipes. Three other main factors have been defined in DIR's field and literature research as determining the extent of uranium and metal sulfide mineralization in collapse breccia pipes during the breccia pipe mineralization process. These factors are: (1) timed existence of bacterial feedstock (oil); (2) upwelling, metal-rich brines; and (3) consequent generation of two proximal geochemical reduction barriers capable of precipitating metal sulfides and uraninite from upwelling mineralizing fluids.

DIR has defined four independent geochemical parameters that serve as causally-related proxies for the breccia pipe mineralization-controlling factors just described. Multi-variable regression of these four independent geochemical parameters measured in surface samples against published uranium reserves-plus-production figures from each test case resulted in a uranium production function that predicts 97.95% of the variation in uranium resource present in the sampled cases. The orientation data set spans a reserves range of 550,000 to 8,100,000 pounds U_3O_8. The average relative deviation for predicted uranium resource *versus* observed uranium reserves-plus-production is ± 140,000 pounds U_3O_8. The statistical nature of the defined breccia pipe uranium production function is such that its application to hitherto undrilled breccia pipe targets in northern Arizona -- surface-penetrating or not -- is very strongly justified.

Test sampling of an additional 23 unmined breccia pipes, and subsequent mineral resource prediction for each of these using the Arizona breccia pipe uranium production function, showed that uranium resource predictions resulting from the application DIR's technique matched published historical exploration drill findings for 78% of these cases. However, DIR surface sampling results indicate that 22% (5) of the 23 test samples were mis-classified by very early historical drilling exploration work and that these breccia pipe ore body discoveries yet merit continued development work.

Predicted versus Measured Uranium Resources

Collapse Breccia Pipes, Northern Arizona

Predicted values based upon geochemical measurement of surface mineralization