

HORN CREEK URANIUM RADIATION MEASUREMENT

Water Collection Date: **28-Mar-2013**

Location: 50 yards upstream from the Tonto Trail crossing.

Sample: 1000ml that was flowing off a rock to avoid disturbing the stream bed.

Gamma Radiation Measurements: **No gamma radiation** was detected with a Polimaster PM1621M x-ray/gamma ray dosimeter at the creek site.

Procedure: The water was returned to a lab then evaporated over a two week period in order to extract the dissolved creek sediments. The resulting sediments were then tested for alpha radiation.

Alpha Radiation Measurements: Using a CD V-700 Model 6b Geiger counter with an alpha window, the alpha radiation from the sample was calculated by subtracting the background rate from the sample rate. This was then converted to Curies by calibrating against the average of four Am-241 ($\tau = 432$ yrs and ~ 0.9 μ Curies each) smoke detector sources.

Alpha Radiation: **24 nCuries of Uranium ore alpha radiation per liter of water.**