**Case History: Direct Exploration for Uranium using Max-Gamma™ Airborne Radiometric Surveys**

The survey area was prospective for uranium and the targets were over barren rock – meaning that radiometric surveys were optimal for the project.

As this is a uranium target, the approach is a survey focusing on the uranium channel almost solely. However, in this case, the total field data are also illustrative and are compared with vertical derivative magnetics data as well.

**Putting a Max-Gamma™ Airborne Radiometric Survey into Action for Uranium**

In working on the project, the objective was to completely map the area – extracting high quality data following appliable over flights, test flights, calibrations, and actual surveying. The data are shown below with total count results, uranium channel results and vertical magnetic derivative.



***Figure 1: Terraquest’s high quality Max-Gamma*™ airborne radiometric survey *data showing total count (left), uranium window (middle), and vertical magnetic derivative (right).***

**The specific results are that:**

* Total count data show the structures in the area, running predominantly north-south with a zone of alteration along the right of the image.
* Vertical derivative data (right) show the persistence of interbedded magnetic units to the west of the image with some alteration (orange) as well.
* The middle map is the key map for uranium exploration – it shows directly where the uranium is in the context of nearby structures illustrated by the total count and vertical magnetic derivative results.

**For More Information**

Terraquest would be pleased to discuss Matrix VLF surveys and interpretation approaches with you, including inversions of existing or planned data. For more information, click here <LINK to EASY-QUOTE form>.