

ENHANCING THE R.L SMITH TEST RANGE – A DEMONSTRATION OF IMPROVED PROCESSING AND NOISE RESULTS USING FULL SPECTRUM FALCON DATA

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During May of 2017, CGG re-acquired data over the RL Smith Test Range using the Full Spectrum Gravity system. The Full Spectrum Gravity system combines the high resolution Falcon Airborne Gravity Gradiometer (AGG) data and the sGrav strap-down gravimeter log wavelength gravity data. This system is the product of years of development work in both technology and processing improvements.

In previous years, we have demonstrated that Falcon has the lowest noise data using the RL Smith Test Range. Using this enhanced processing technique we are able to better differentiate acquisition noise from geologic signal. This allows us to better remove the acquisition related noise, while retaining higher resolution data and getting improved noise results.

With the introduction of Full Spectrum Gravity, we have had to create new quality control mechanisms to evaluate data accuracy. We will demonstrate these quality control tools that can be applied to verify the Falcon data, sGrav data and Full Spectrum Gravity data.

In conclusion, we show the improvement achieved after years of development with the Full Spectrum Gravity System. We demonstrate the improved noise results and new quality control measures used to evaluate the quality of the Full Spectrum Gravity data using the RL Smith Test Range.