

# Rum Jungle Uranium Ltd

## Sample Preparation Statement – Portable XRF Analysis

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Rum Jungle Uranium operates a Niton XL3t XRF Analyser for rapid analysis of samples in the field and for use with prepared samples in the laboratory. This document briefly describes the sample preparation procedure and documentation.

### ***Database Codes***

In all data submitted to NGTS includes all output fields from the Niton for all samples. Additionally RJU includes database fields and codes to describe sample type and preparation (Table 1).

**Table 1 RJU Database fields and code for Niton reporting**

Database Field	Code	Meaning	
[SampleType]	RK_Cr RK_Fld RK_Lab SL	Rock Crushed Rock Whole in field Rock Whole in lab Soil	
[Sieve] (for use with SL)	plus 10  minus10  minus10 plus60#	Soil sieved to remove minus 10 fraction Soil sieved to remove plus 10 fraction while collecting minus 10 fraction Soil sieved to retain minus 10 to plus 60 fraction	

# note mesh size may vary, e.g. plus 80 rather than plus 60

### ***Sample preparation***

#### **Soil and regolith**

Soil samples including a coarse fraction are milled in a mortar and pestle and then loaded into a sample vessel for XRF analysis

Soil sample finer than 60mesh are loaded directly into a sample vessel for XF analysis.

## **Rocks and Rock Chips**

In the field outcrop is chipped with a geological hammer and XRF analysis performed on the fresh face. Since the XRF beam can be aimed at particular section of the rock sample, quite often several XRF shots will be made on the same outcrop to target particular features, e.g. veins, alteration zones etc. Any special arrangements will be annotated in the comments field of the database.

Rock chip samples returned to Rum Jungle's office are crushed to fine powder using an electric jackhammer and special crushing bit in a steel mortar pot. The prepared sample is loaded into a sample vessel for XRF analysis.

Note that samples subject to XRF analysis may also be sent for assay to a commercial laboratory such as NTEL or Amdel. In this case reports sent to NTGS will contain separate files containing both datasets.