



ATHABASCA PROJECTS

QUALITY ASSURANCE AND QUALITY CONTROL – QA/QC

All technical information for the Company's Athabasca projects is obtained and reported under a formal quality assurance and quality control (QA/QC) program under the supervision of Vice-President Exploration and Qualified Person, David L. Billard, PGeo.

Prospecting - Sampling Method and Approach

Prospecting samples are chosen on the basis of radiometric data as well as mineralogical parameters. This radiometric data is obtained by using a handheld scintillometer/spectrometer (Radiation Solutions RS-125). The general concept behind the scintillometer is similar to the gamma probe except the radiometric pulses are displayed on a digital screen and the respective count rates are recorded manually by the geologist and/or prospectors collecting the samples. It should be noted that the handheld scintillometer provides quantitative data only and may not be used to calculate uranium grades. It does however allow the geologist to identify uranium mineralization and thereby identify localities for geochemical sampling.

The general procedure for prospecting is to traverse an area of interest with the scintillometer and at the same time make geological and physical observations in order to make selections for geochemical sampling. Any of the following criteria may be used as a rationale for collecting the sample: count rates exceeding 200 to 500 counts per second (cps; effectively 3x background radiation); sulphide mineralization, and; prospective geology and/or mineralogy. An alternative method may be to collect samples of soil or lake sediments on a systematic basis in order to ascertain geochemically anomalous areas for follow-up prospecting and geological observations.

It should be noted that these levels of sampling provide quantitative data only and that they do not provide qualitative data that could be relied upon for a strict economic evaluation of an area.

Sample Preparation, Analysis and Security

Once a sample site is identified, an exclusive sample number is assigned to it. This number and interval is annotated with indelible marker on a tag in the field for subsequent field identification. The sample is collected and sealed in a new plastic sample bag along with a printed sample tag corresponding to the sample number annotated on the field label. The pertinent geological details of the sample as well as its location coordinates are recorded by the in-field personnel. After the samples are collected and have been returned to the base camp, the procedures for Analysis and Security are identical to those described in the following *Diamond Drilling - Sample Preparation, Analysis and Security* description.

Diamond Drill Program - Sampling Method and Approach

Samples of drill core are chosen on the basis of radiometric data collected during core logging. This radiometric data is obtained by using the handheld scintillometer (Radiation Solutions RS-125). As is the case for prospecting, the handheld scintillometer provides quantitative data only and may not be used to

calculate uranium grades. It does however allow the geologist to identify uranium mineralization in the core and thereby identify intervals in the core for geochemical sampling.

The general procedure is to scan the entire hole with the scintillometer. Those areas that indicate count rates exceeding 60 to 70 counts per second (cps; effectively 2x background radiation) are selected for geochemical sampling. Additional samples are collected above and below the mineralized areas that are identified in order to “close-off” the sample intervals. Sample widths are selected according to radiometric values, with individual samples varying in core length from 0.2 to 0.7 metres.

All reasonable efforts are made to ensure that splitting of the core is representative and that no significant sampling biases occur. Core recovery does not materially affect the reliability of the geochemical results, as geochemical results are not reported where core recovery is determined to be less than 95%. In cases where core recovery is not optimal, down-hole radiometric probe results are used for grade calculations. Probe results are presented as “grade equivalent” U_3O_8 (e%). It should be noted that in a direct comparison of probe results versus geochemical results (where core recovery is a minimum of 95%), probe results tend to return lower values than geochemical (“true”) grades. This is due to the methodology employed by the probe, and is widely acknowledged within the Uranium industry.

Diamond Drilling - Sample Preparation, Analysis and Security

Once the sample intervals are identified, an exclusive sample number is assigned each interval. This number and interval is annotated with indelible marker on the wooden core boxes and recorded by the on-site geologist.

After the geological logging of the core and sample selection, all of the selected sample intervals of drill core are split longitudinally at the drill site. The core is split with a mechanical splitter designed specifically for splitting drill cores in this fashion. One half of the core is placed and sealed in a new plastic sample bag along with a printed sample tag corresponding to the sample number annotated on the core box. The other half of the core is re-assembled in the core box and stored in a covered storage rack for future reference. The mechanical splitter and sample collection pans are cleaned thoroughly with a brush between each sample. The individual sample bags are sealed into plastic pails and stored in a secure location on-site. Sample pails are transported to the analytical laboratories of Saskatchewan Research Council (SRC) in Saskatoon, Saskatchewan under the direct supervision of company personnel.

The Company’s methodology for collection of litho and geochemical samples in the field, including identification, storage and transport, follows the same strict security protocol as described for the drill core samples. All analyses are conducted by SRC, a Standards Council of Canada (CCRMP) certified analytical laboratory. SRC has specialized in the field of uranium research and analysis for over 30 years and is Canada’s only Canadian Nuclear Safety Commission (CNSC) licensed laboratory for the analysis of Uranium samples.

The following outlines SRC’s sample processing and analytical procedures:

SASKATCHEWAN RESEARCH COUNCIL (SRC) - U_3O_8 Analytical Procedure

All data for U_3O_8 assaying is obtained under a QA/QC program that involves sample processing and analysis as follows:

Drill cores are received from the client in sealed twenty litre plastic pails. Each core sample is contained in a sealed plastic bag with a sample tag. A packing slip is enclosed that contains instructions and a

sample number list. Samples are verified against the packing slip. Any extra samples or missing samples are noted and the client is informed.

Samples are sorted according to radioactivity, dried and processed as follows:

- The radioactive sample preparation facility is licensed through the Canadian Nuclear Safety Commission (SNSC).
- Samples are processed from lowest to highest radioactivity.
- Crushed to 60% - 2 mm. Approximately 200 g of crush is riffled out then ground in a chrome steel grinding mill to 90% - 106 microns.
- Replicates are chosen at random and another 200 g of crush is riffled and ground.

The pulp is digested in aqua regia leach and diluted. The solutions are then analyzed by ICP for various trace elements.

Certified U_3O_8 standards are analyzed with samples with corresponding radioactivities. The detection limit is 0.002 wt% U_3O_8 . Accuracy at various concentrations of U_3O_8 are listed below:

Sample #	%U_3O_8	Typical Accuracy
BL-1	0.026	±0.004
BL-4a	0.147	±0.004
BL-2a	0.502	±0.008
BL-3	1.21	±0.02
BL-5	8.36	±0.10
RS2-11	48.0	±0.7

Check assays are done on selected pulps by DNC (Delayed Neutron Counting) at SRC's Analytical Laboratories. All radioactive samples are monitored and recorded as per CNSC license 01784-1-09.0

SASKATCHEWAN RESEARCH COUNCIL - U₃O₈ Flow Chart

