

Customized Standard Reference Material

Standard Reference Materials (SRM) of known elemental composition play an important role in the quality assurance (QA) of grass roots exploration programs and development projects. SRMs are developed to meet measurement needs and as control samples. They provide a known, well characterized entity to compare and evaluate laboratory analysis results. Unfortunately not all laboratory results are the same despite the fact they may be generated by the same analytical method such as fire assay with an atomic absorption finish. There are variations to the technique that each lab uses as well as a variety of calibration procedures which may lead to vastly different results on your samples. Some of these differences include amount of litharge in the flux, the flux to sample ratio, reuse of the same crucibles, age and state of repair of instrumentation, diligence of analysts in calibration, age of standards, sample preparation, etc. Using hidden SRMs with values only known to you on your standards provides an excellent means to judge accuracy and precision of the labs you are using. This is critical for the QP to avoid future embarrassment and undermine confidence in results in the investor's mind on the reliability of results.

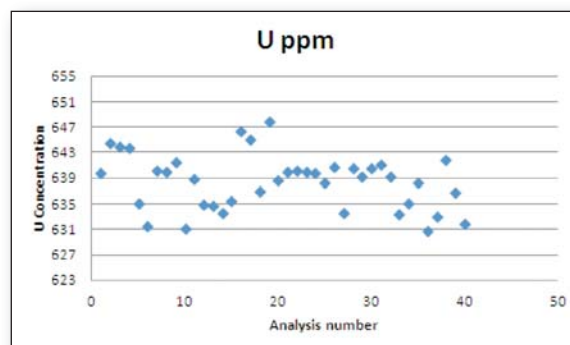
SRM Preparation

In order to provide the exploration market with SRMs, Actlabs has developed a set of rigorous sample preparation procedures. We can use natural soils, rock, ores or sediments collected by the client from their project area so their matrix is matched (best case scenario on your samples). Samples from 1 and up to 125 kg can be prepared as an SRM. The whole sample is dried at 60 degrees, then is crushed, pulverized and screened with 100% #240 mesh (-63 microns) stainless-steel sieve. The resulting pulp goes through a blending step using a Stainless Steel industrial V-Blender. The blend is achieved by the constant dividing and inter-meshing particle movement by the two connected cylinders. Inside the blender is a high-speed agitator bar to thoroughly mix the sample. Each cylindrical leg has an access cover for easy material loading and cleaning.

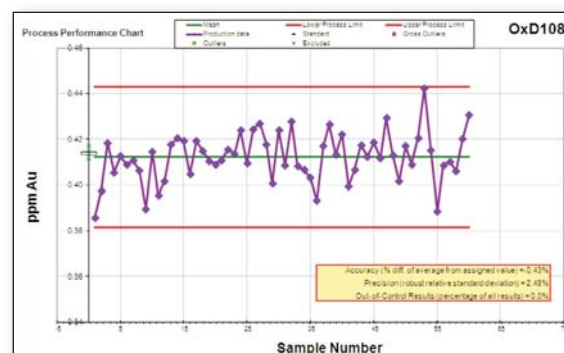
A homogeneity test will show that all elements in the mixture were distributed evenly within the material. After results of the homogeneity testing are determined, the mixed material is packed in plastic bottles or in sealed foil pouches under nitrogen (to prevent oxidation of sulphides).

Any suggested elements or group of elements can be certified (this also applies to major, minor and trace elements). Actlabs can certify concentration of elements by using any digestion you will use for your projects or for total metals. As we have perhaps the most diverse lab with virtually all instrumentation including fire assay (nickel sulphide and lead), atomic absorption, gravimetric, ICP-OES, ICP-MS, HR-ICP-MS, XRF, INAA, CNHS analyzers and many more, we can develop values or can go round robin to other labs to certify values.

For more information please contact us at crm@actlabs.com.



Homogeneity Testing



Au Control Charting

