ACZ Laboratories, Inc.

A Full Service Environmental Testing Laboratory

In Vitro Bioaccessibility

In vitro bioaccessibility analysis measures the potential hazard from ingestion of metals in soil, dust or other solid-like waste material. The *in vitro* bioavailability or *in vitro* bioaccessibility methods were developed to replace the much more costly oral *in vivo* test, which are conducted on live animals. EPA *In Vitro* Method



9200.1-86 estimates the oral bioaccessibility of both lead and arsenic from soil by simulating the stomach fluid of a swine. The analysis is highly controlled in terms of temperature as well as pH of the fluid.

In 1999, ACZ was one of a few laboratories in the nation to be selected to participate in the Solubility/Bioavailability Research Consortium (SBRC). The SBRC was developed and managed by Exponent Environmental Group. ACZ has subsequently been selected to participate in validation of standard reference material used in the EPA *in vitro* bioaccessibility method.

ACZ has worked with various industries for *in vitro* bioaccessibility testing including: Brownfield cleanup projects, contaminated mine and industrial sites, as well as USFS, BLM and US Military firing range cleanups. Many of ACZ's clients have benefited both scientifically and financially when their sites under investigation were not forced to remove contaminated soils. This was due to the fact that the metals contamination was deemed not bioaccessible.



About ACZ

ACZ is NELAP accredited and holds certifications in most western states. ACZ's 31,000 sq. ft. state-of-the-art facilities and experienced staff ensure the support of large projects, while still providing superior personalized customer service.

ACZ provides our clients high quality data in a timely manner. A commitment to quality and extensive experience make ACZ the right choice for your analytical service needs.

For more information visit ACZ online: <u>www.acz.com</u> **ACZ** Laboratories, Inc 2773 Downhill Dr. Steamboat Springs, CO 80487 Phone: 1-800-334-5493 Email: <u>sales@acz.com</u>