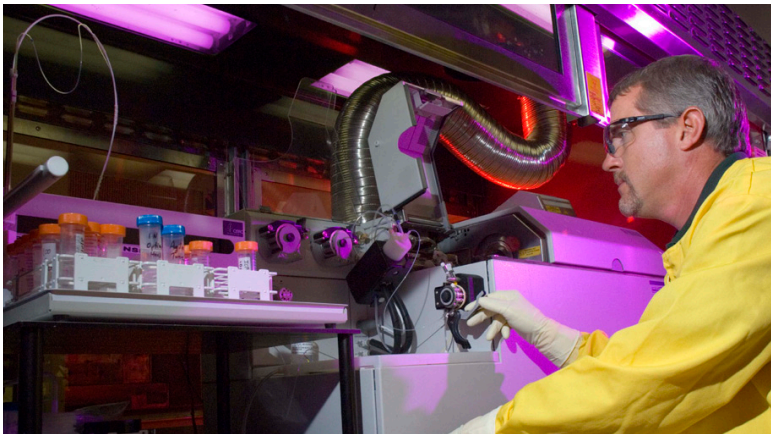
SAVANNAH RIVER SITE

Facts enterprise·srs

Analytical Laboratories



A lab employee performs technical oversight of an Inductively Coupled Plasma-Mass Spectrometer.

The Savannah River Site's (SRS) Analytical Laboratories have supported SRS operations for more than 55 years, providing high quality analytical, radiometric and environmental monitoring data to a range of customers. Since the mid-1950s, the labs have provided a diverse array of scientific and technical services in support of Site missions.

The labs perform analyses on a wide range of matrices, such as soil, water, gases, foodstuffs, decommissioning debris, waste and process control samples.

The laboratories maintain certifications and qualifications through a variety of governing bodies, which allow multiple applications of laboratories services. Over 100,000 samples are processed yearly, producing 300,000 determinations with an error-free rate averaging 99.99 percent.

Laboratory background Analytical Laboratories include seven different facilities across SRS, ranging from low hazard chemical to Category II Nuclear facilities. The first lab was constructed in 1954 and consists of 80,000 square feet. It is a blast-resistant (earthquake/tornado) concrete single-story building with a full below-ground service floor. The structure meets Phenomena Hazard Category II criteria. Additional buildings were constructed in the 1980s, increasing square footage by another 40,000 square feet.

The laboratories maintain certifications through the Department of Energy's (DOE) Laboratory Accreditation Program, South Carolina Department of Health and Environmental Control, the American Industrial Hygiene Association, and the Mixed Analyte Performance Evaluation Program. The laboratories also participate in plutonium and uranium external exchange and evaluation programs sponsored by DOE for assay, isotopic abundance and impurity measurements.

Meticulous work is part of routine operations in Analytical Laboratories.

Current customers The labs' customers include F and H Area facilities, the K Area Complex, the L Area Complex, liquid waste management and disposition facilities, Tritium Facilities, Savannah River National Laboratory, Area Completion Project (which includes deactivation and decommissioning and soil and groundwater remediation), environmental monitoring, industrial hygiene, the bioassay facilities, the International Atomic Energy Agency, Los Alamos National Laboratory, New Brunswick Laboratory, Sandia National Laboratory, Lawrence Livermore National Laboratory, the Hanford Site, Lawrence Berkeley National Laboratory and the Idaho National Laboratory, among others.

Analytical Laboratories Mission

To safely operate nuclear and environmental laboratories in providing the highest quality analytical services to a variety of customers.

Vision

To become a world-class analytical laboratory and to be recognized as such by our customers.

Principles

- *Safety is foremost in all of our activities.*
- *Conduct ourselves with the highest of values and standards.*
- *Be an excellent steward of our customers' trust.*
- *Foster leadership qualities in all of our employees.*
- *Provide analytical services below the cost of our competitors.*

Analytical capabilities SRNS Laboratory Services provides a full complement of analytical services in support of radiochemical processing, as well as radiological environmental monitoring programs. Analytical analysis results are used for process control, nuclear safety, nuclear criticality prevention, nuclear material accountability, product quality, radiological waste characterization, regulatory compliance and personnel safety.