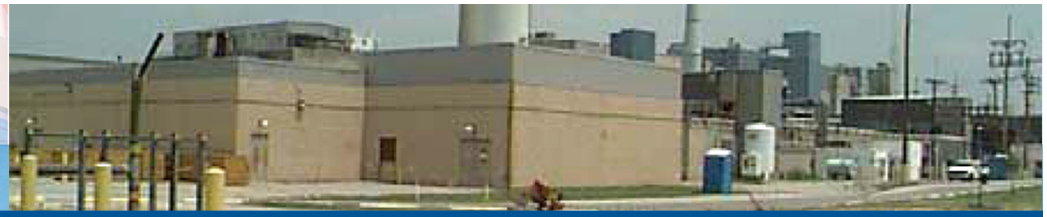
Savannah River Nuclear Solutions, LLC



Analytical Laboratories: **F/H Area Laboratory**

The F/H Laboratory is the largest of the seven laboratories within the SRS Analytical Laboratories Project with over 100,000 square feet of floor space, and 20,000 square feet of lab space. Building 772-F, with 25 active laboratory modules, is a blast-resistant concrete structure. Building 772-1F has 23 active laboratory modules and four shielded analytical cells. There are two additional laboratories located within the H-Canyon and HB-Line Facilities. All the laboratories operate 24 hrs/day and 7 days/week.

Types of Samples Accepted	Core Capabilities	Unique Capabilities and Specialties	Accreditations and Certifications	Planned Future Capabilities
The F/H Lab accepts both radiological and non-rad liquid and solid samples for process control, product quality, accountability, and criticality safety analyses. The F/H Lab is also qualified to accept several types of Industrial Hygiene samples and is currently analyzing samples from onsite and offsite customers. The facility operates under limits for radiological and fissile material based on the hazard categorization of the facilities (772-F is Hc-2 / 772-1F is HC-3). In most cases, high alpha or radiological samples may be diluted in glove boxes or shielded analytical cells for analysis in other locations within the laboratory.	Chromatography - IC, GC (TCD/FID) Classical Wet Chemistry Electrochemistry - Coulometry Radiochemistry - Alpha, Gamma, LSC Spectrometry - ICP-ES, ICP-MS, TIMS Shielded Cell Sample Prep (High Rad) Glove Box Sample Prep (High Alpha)	F/H Lab is the only lab that can handle Pu-contaminated samples for Cr^{+6}, asbestos, or Pb in paint chips. We are the DOE leaders in rad beryllium. The lab can also analyze filters for RCRA metals and hexavalent chromium. In addition, radiological samples for lead, chromium, zinc, and total chromium can be analyzed on filters and swipes. Built by the Savannah River National Laboratory (SRNL) and certified by the F/H Lab, controlled-potential coulometry is used to precisely measure the concentration of plutonium and neptunium and is the instrument of choice for international nuclear accountability programs. ISO standard 12183 for plutonium coulometric assay is based upon SRS methodology. Thermal Ionization Mass Spectrometers provide “state of the practice” isotopic abundance and concentration measurements for uranium and plutonium.	AIHA accreditation to ISO17025 criteria for the analysis of beryllium, lead, and other RCRA metals by ICP-AES, asbestos by microscopy, and hexavalent chromium by ion chromatography (IC) Participates in a variety of external exchange programs across the national and international communities	Rad TCLP Beryllium analysis of rad-contaminated soils

For all your F/H analytical laboratory needs, please contact:

Woodie Melton
803.952.4331
woodie.melton@srs.gov

Janice Lawson
803.952.3632
janice.lawson@srs.gov.

Savannah River NUCLEAR SOLUTIONS℠
FLUOR DANIEL • NORTHROP GRUMMAN • HONEYWELL