Analytical Laboratories

SAVANNAH RIVER NUCLEAR SOLUTIONS, LLC





Providing production and remediation laboratory support for the Savannah River Site

Nuclear Material Dissolution from Destructive Analysis Measurements

Overview

The Savannah River Site F/H Laboratories perform nuclear material dissolution of Pu/U oxides and metals plus Np oxide to support site productions/remediation projects. Nuclear material dissolutions are performed in glovebox containment via microwaves, hot blocks and hot plates. Resulting solutions are aliquotted for a variety of elemental and compound analyses.

Features

- Varying sample size (100 mg 30g)
- High temperature digestions up to 200°C
- Computer-controlled temperature and pressure dissolutions
- Excellent analyte recovery in destructive analysis
- Commercially-available electronic equipment with trained operators
- Capable of handling high alpha activity levels (facility source term limit of 310 Alpha Curies)



The Savannah River Site is owned by the U.S. Department of Energy. The managing and operating contract is held by Savannah River Nuclear Solutions, LLC.