

**For Immediate Release**  
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## **Idaho Calcine Project Partners With University for Radiation Testing**

**IDAHO FALLS, Idaho** – Engineers with cleanup contractor Fluor Idaho are working with Idaho State University to conduct radiation testing on components to be used to remove a granulated high-level radioactive waste called calcine from a storage bin at the Department of Energy's (DOE's) Idaho National Laboratory Site.

Calcine is a dried byproduct of the legacy spent nuclear fuel reprocessing mission at the Idaho Nuclear Technology and Engineering Center (INTEC).

The engineers partnered with physicists at the Idaho Accelerator Center Imaging Laboratory at the university to subject electronic components, rubber seals and eight small video cameras to high levels of radiation to replicate the conditions the components will encounter once inserted into a concrete bin set that houses 220 cubic meters of calcine.

"The components fared very well," Fluor Idaho engineer Kevin Young said. "The unshielded video cameras operated as designed for more than nine hours with minimal image degradation despite being in a very high radiation field."

The laboratory went online in the 1980s to perform nuclear-based applied research. It was chosen to conduct testing on the calcine retrieval components because it is more cost effective and safer than recovering a portion of calcine and conducting testing in a hot cell, which is a radiation containment chamber.

Fluor Idaho has completed a full-scale mock-up of a calcine bin set where testing continues on entry, retrieval and transfer technologies that will be employed to transfer calcine to a nearby bin set. The bin set emptied of calcine will then be closed under federal regulations.

In an agreement with the state of Idaho, DOE is required to retrieve, treat, repackage and prepare 4,400 cubic meters of calcine to ship for out-of-state disposal by 2035. The material is in storage in six separate bin sets inside concrete vaults at an INTEC facility.

*Fluor Idaho, LLC is a wholly owned subsidiary of Fluor Corporation with subcontractor partners CH2M, North Wind Inc., Portage, and Waste Control Specialists. Fluor Idaho manages the Idaho Cleanup Project Core contract at the Department of Energy's Idaho National Laboratory Site located 45 miles west of Idaho Falls. The 5-year, \$1.4 billion project, funded through the U.S. Department of Energy's Office of Environmental Management, focuses on safely remediating the Idaho National Laboratory site including dispositioning transuranic waste, managing spent nuclear fuel, and treating high-level radioactive waste.*

For more information visit the Idaho Cleanup Project on the Web at <https://fluor-idaho.com>

### Suggested Caption

Fluor Idaho Engineer Kevin Young, left, and Idaho Accelerator Center Imaging Laboratory Director Mike Smith prepare calcine retrieval project components for radiation testing with a high-powered X-ray generator.

