

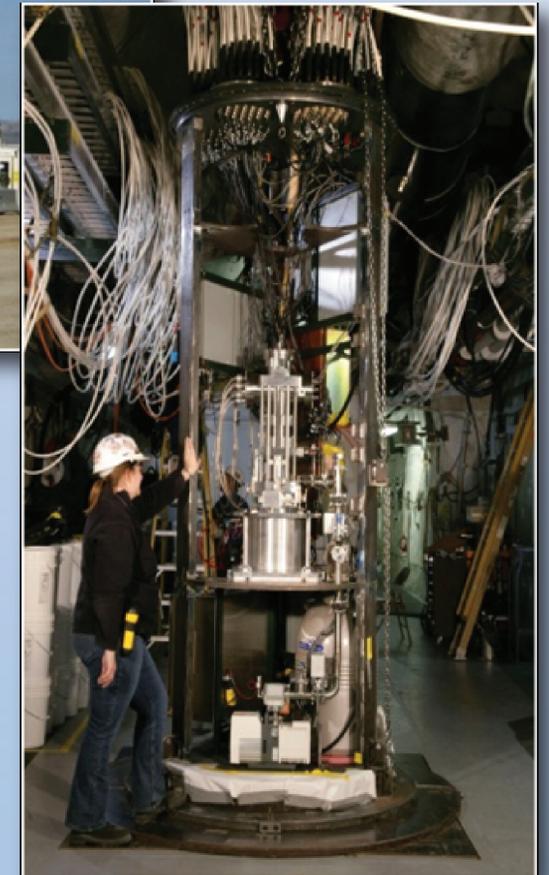
Stockpile Stewardship

Subcritical Experiments at the U1a Complex

- Obtain technical information about the U.S. nuclear weapons stockpile in the absence of nuclear testing
- Use chemical high explosives to generate high pressures that are applied to special nuclear materials, such as plutonium
- There is no critical mass formed, so no self-sustaining nuclear fission chain reaction occurs
- Scientists obtain data on the behavior of special nuclear materials by using sophisticated, high speed diagnostic instruments
- Consistent with the existing U.S. nuclear testing moratorium



The U1a Complex



Krakatau, a subcritical experiment conducted on February 23, 2006, at the U1a Complex