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Press Release

ALASKA STATE MUSEUM

FOR IMMEDIATE RELEASE

DATE: August 22, 2011

TAKE AIM WITH ALASKA STATE MUSEUM'S "SCIENCE GUN" Museum to Host Public Viewing of High-Tech X-Ray Machine on Loan from Lower 48

JUNEAU – Have you ever wondered what your favorite knick-knack was made of? Own some old coins you'd like to know more about? Is that gold necklace really a gold necklace?

Find out on First Friday, Sept. 2 from 4:30 pm to 6:00 pm (and then again on Saturday, Sept. 3 from 1:00 pm to 3:00 pm) as the Alaska State Museum invites the public to try out its portable x-ray fluorescence (XRF) machine, affectionately referred to by ASM staff as the "science gun."

Literally the x-ray gun of sci-fi lore, the portable XRF shoots a small, controlled beam of x-rays at an object. It then measures the resulting movement of electrons—the subatomic particles orbiting an atom's nucleus—from which it can deduce the object's chemical composition.

The XRF works especially well at identifying heavier elements with more electrons. These materials include metals, minerals, and glass. In fact, the museum asks the public to bring small metal objects only, such as coins, toys or jewelry. (Analysis will not harm your object in any way.)

On loan from Bruker, a leading designer and manufacturer of high-tech instruments, the portable XRF has spent the summer touring Alaska—in "really bomber Pelican travel cases," ASM artifact conservator Ellen Carlee puts it.

She and fellow conservator Scott Carrlee have spent several weeks frenziedly examining artifacts from the museum's collection, before the science gun heads to Anchorage.

The public viewing aims to demonstrate the connection between art and science, highlighting the technology and processes employed by the Alaska State Museum to preserve and interpret Alaska's history.

Winter hours at the museum will take effect on September 21. Winter admission is \$3. Summer admission is \$5. Visitors 18 and under are admitted free of charge. An annual pass that allows unlimited visits to the Alaska State Museum and the Sheldon Jackson Museum in Sitka is available for \$15. Assistance is available for visitors with special needs. Please contact Visitor Services at 465-2901 before the visit.

FOR MORE INFORMATION:

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www.museums.state.ak.us

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