



U.S. Department
of Transportation
**Pipeline and
Hazardous Materials
Safety Administration**

**IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE USA/0783/S-96, REVISION 1**

East Building, PHH-23
1200 New Jersey Avenue Southeast
Washington, D.C. 20590

This certifies that the source described has been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency¹ and the United States of America² for the transport of radioactive material.

1. Source Identification - U.S. Department of Energy 10 kg HEU Equivalent Radiological Signature Training Device.
2. Source Description - Spherical single encapsulation made of Titanium. Approximate outer dimension is 124.61 mm (4.91 in.) in diameter. Wall thickness is approximately 2.24 mm (0.09 in.). Construction shall be in accordance with attached UT-Battelle Drawing #20120719_001, Rev. 0.
3. Radioactive Contents - Solid uranium metal with maximum radionuclide activities of:

Uranium-233 - 6.91 MBq (0.187 mCi);
Uranium-234 - 394.22 MBq (10.655 mCi);
Uranium-235 - 12.52 MBq (0.338 mCi);
Uranium-236 - 1.77 MBq (0.048 mCi); and
Uranium-238 - 13.47 MBq (0.364 mCi).
4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations¹ shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors in the United States exporting shipments under this certificate shall satisfy the applicable requirements of Subpart H of 10 CFR 71.
5. Expiration Date - This certificate expires on June 30, 2022.

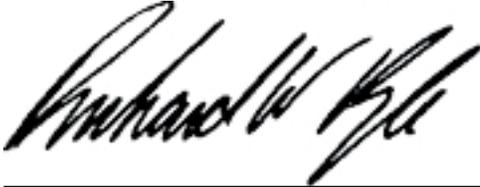
¹ "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

² Title 49, Code of Federal Regulations, Parts 100-199, United States of America.

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This certificate is issued in accordance with paragraph 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the June 08, 2017 petition by Department of Energy, Washington, DC, and in consideration of other information on file in this Office.

Certified By:

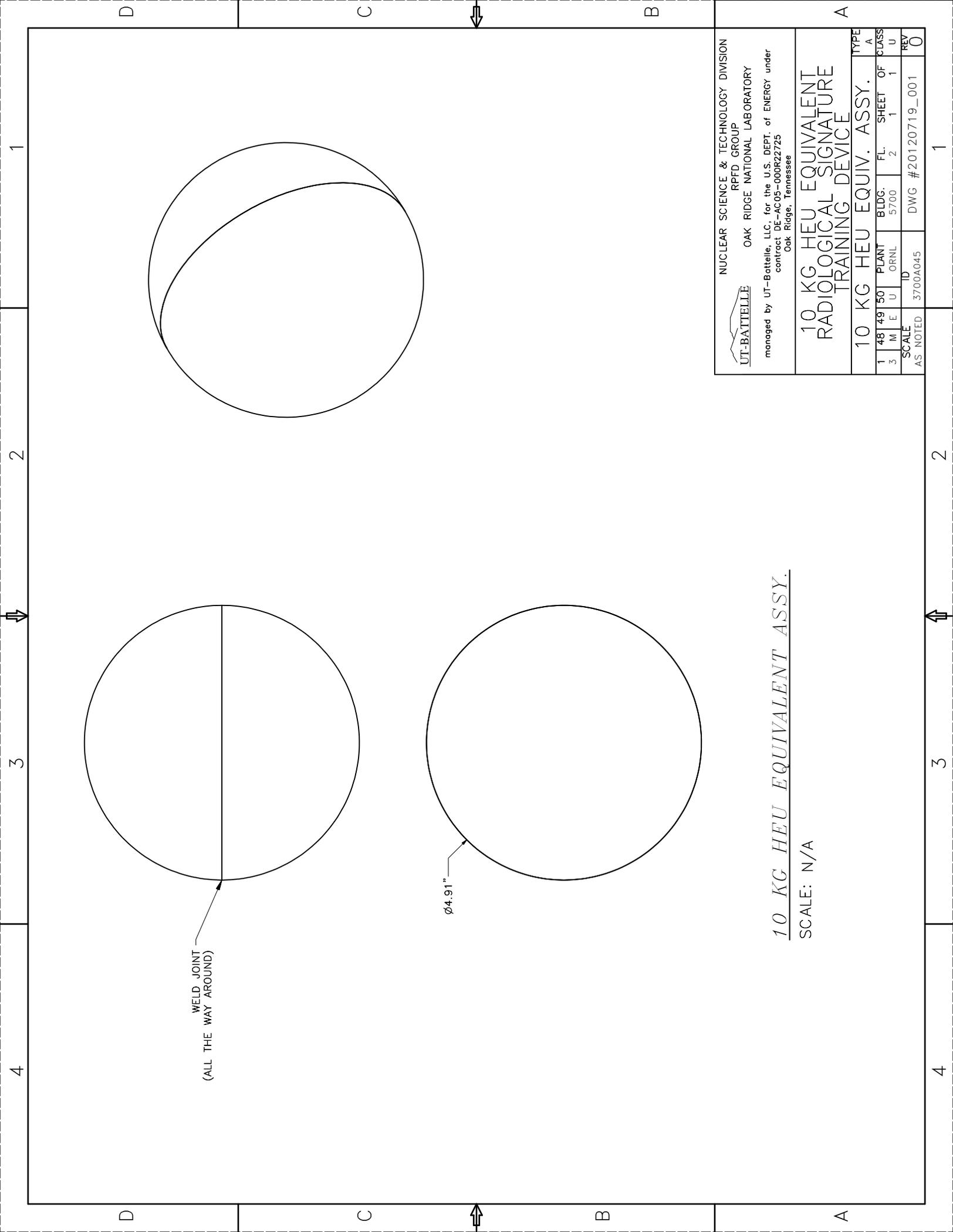


Jun 15 2017

(DATE)

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William Schoonover
Acting Associate Administrator for Hazardous Materials Safety

Revision 1 - Issued to extend the expiration date.



WELD JOINT
(ALL THE WAY AROUND)

Ø4.91"


 NUCLEAR SCIENCE & TECHNOLOGY DIVISION
 RFPD GROUP
 OAK RIDGE NATIONAL LABORATORY
 managed by UT-Battelle, LLC, for the U.S. DEPT. of ENERGY under
 contract DE-AC05-00OR22725
 Oak Ridge, Tennessee

**10 KG HEU EQUIVALENT
 RADIOLOGICAL SIGNATURE
 TRAINING DEVICE**

1	48	49	50	PLANT	BLDG.	FL.	SHEET	OF	CLASS
3	M	E	U	ORNL	5700	2	1	1	U
SCALE		ID	DWG		REV				
AS NOTED		3700A045	#20120719_001		O				

10 KG HEU EQUIVALENT ASSY.

SCALE: N/A



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Washington, D.C. 20590

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CERTIFICATE NUMBER: USA/0783/S-96, Revision 1

ORIGINAL REGISTRANT(S):

Dr. James M. Shuler
Manager, Packaging Certification Program
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U.S. Department of Energy
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Washington, DC 20585