



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

**IAEA CERTIFICATE OF COMPETENT AUTHORITY  
SPECIAL FORM RADIOACTIVE MATERIALS  
CERTIFICATE USA/0782/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 Agency<sup>1</sup> and the United States of America<sup>2</sup> for the transport of radioactive material.

1. Source Identification - U.S. Department of Energy Highly Enriched Uranium (HEU) Test Object.
2. Source Description - Spherical single encapsulation made of CP3 Titanium. Approximate outer dimension is 124.58 mm (4.9 in.) in diameter. Wall thickness is approximately 2.29 mm (0.09 in.). Construction shall be in accordance with attached UT-Battelle Drawing No. 20101202\_002, Rev. 0.
3. Radioactive Contents - Solid uranium metal with maximum radionuclide activities of:  
  
Uranium-233 2.063 MBq (0.056 mCi);  
Uranium-234 137.262 MBq (3.710 mCi);  
Uranium-235 4.127 MBq (0.112 mCi);  
Uranium-236 1.172 MBq (0.032 mCi); and  
Uranium-238 3.376 MBq (0.091 mCi).
4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations<sup>1</sup> 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 November 30, 2015. On March 31, 2011, this certificate supersedes all previous revisions of USA/0782/S-96.

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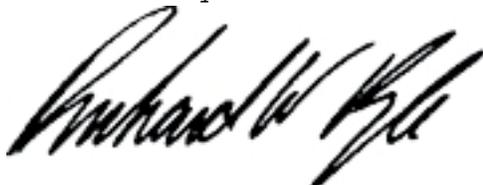
<sup>1</sup> "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

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

**CERTIFICATE USA/0782/S-96, REVISION 1**

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 January 14, 2011 petition by Department of Energy, Washington, DC, and in consideration of other information on file in this Office.

Certified By:



**Jan 24 2011**

(DATE)

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Dr. Magdy El-Sibaie  
Associate Administrator for Hazardous Materials Safety

Revision 1 - Issued to update the radioactive contents.

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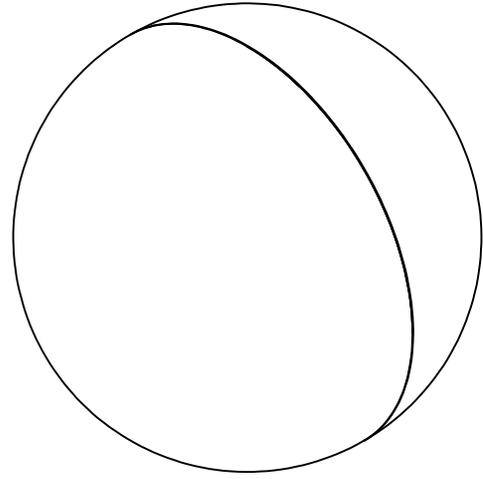
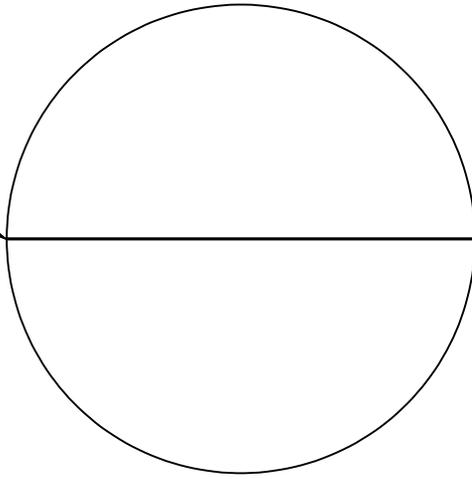
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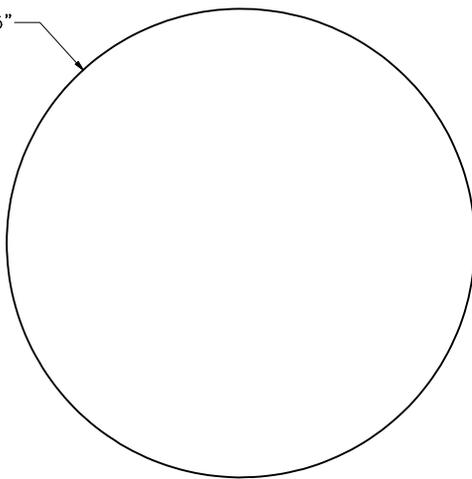
WELD JOINT  
(ALL THE WAY AROUND)



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HEU TEST OBJECT ASSY.

SCALE: N/A


 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

HEU TEST OBJECT ASSY.

HEU TEST OBJECT ASSY.						TYPE A			
1 3	48 M	49 E	50 U	PLANT ORNL	BLDG. 5700	FL. 2	SHEET 1	OF 1	CLASS U
SCALE AS NOTED		ID 3700A045		DWG. NO. 20101202_002		REV 0			

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1200 New Jersey Avenue SE  
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Safety Administration**

**CERTIFICATE NUMBER:** USA/0782/S-96, Revision 1

**ORIGINAL REGISTRANT(S):**

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