



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

**IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE USA/0242/S-96, REVISION 7**

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 - Monsanto Research Corporation Model 24154-C source manufactured prior to December 10, 2001.
2. Source Description - The source is a tungsten inert gas welded double encapsulation constructed of Type 304 stainless steel. It is in the form of a cylindrical sleeve with an outside diameter of 35.0 mm (1.375 in.), an inside diameter of 28.1 mm (1.105 in.), and a height of 12.7 mm (0.500 in.). Sources are to be manufactured in accordance with attached Monsanto Research Corporation Drawing No. C24154-AC00, Rev. 0.
3. Radioactive Contents - Not more than 0.037 TBq (1.0 Ci) of Americium-241 as an oxide mixed with powdered neutron producing target material.
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 November 30, 2017.

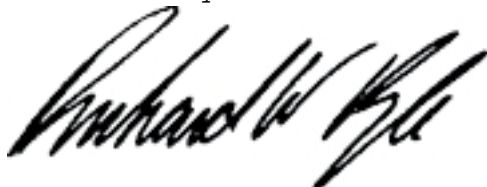
¹ "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency(IAEA), Vienna, Austria.

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 October 19, 2012 petition by Schlumberger, Sugar Land, TX, and in consideration of other information on file in this Office.

Certified By:

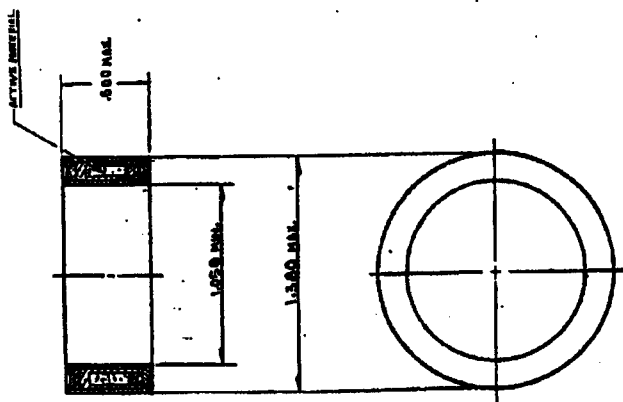


Nov 14 2012

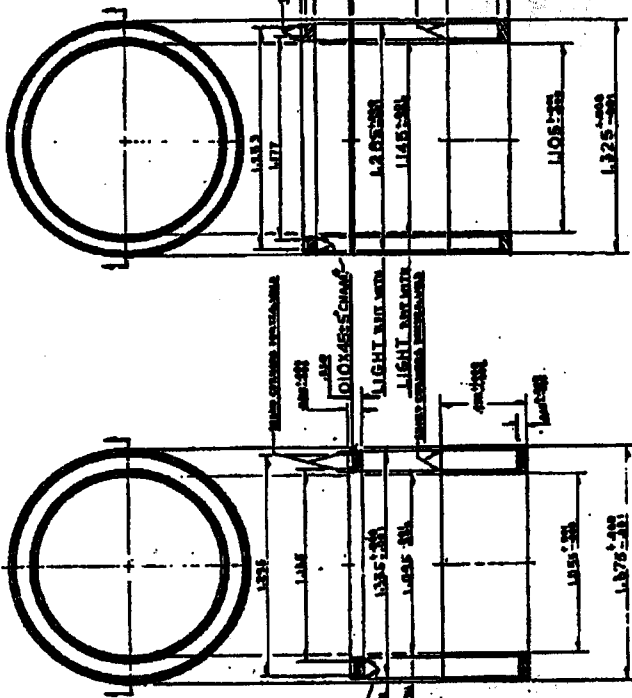
(DATE)

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

Revision 7 - Issued to extend the expiration date.



NOTICE:
 1. THIS DRAWING WAS PREPARED FOR THE UNITED STATES GOVERNMENT.
 2. THE DRAWING SHALL BE THE PROPERTY OF THE UNITED STATES GOVERNMENT AND SHALL BE RETURNED TO THE UNITED STATES GOVERNMENT UPON REQUEST.



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VISUAL INSPECTION ACCEPTABLE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	FRACCTIONS	INCHES	DATE
TOLERANCES	± 1/32	± 0.005	
ALL SURFACES	BY		
MATERIAL	303-304 STAINLESS STEEL		
FINISH			
CHECKED	HAN		
DRAWN	HAN		
DATE			

MONSANTO RESEARCH CORPORATION
 BAYVIEW LABORATORY
 BAYVIEW, OHIO

RING-NEUTRON SOURCE
 MODEL-24154-C

SCALE - 2X WT. ACT.

DATE: 9/21/58
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of Transportation

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Washington, D.C. 20590

**Pipeline and
Hazardous Materials
Safety Administration**

CERTIFICATE NUMBER: USA/0242/S-96, Revision 7

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