



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

**IAEA CERTIFICATE OF COMPETENT AUTHORITY  
SPECIAL FORM RADIOACTIVE MATERIALS  
CERTIFICATE NUMBER USA/0240/S, REVISION 2**

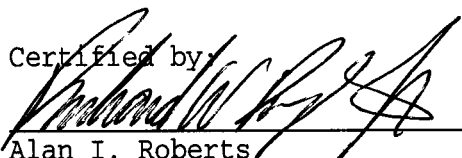
400 Seventh Street, S.W.  
Washington, D.C. 20590

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 materials.

1. Source Identification - Monsanto Research Corporation Model No. 24173.
2. Source Description - The source described by this certificate is a tungsten-inert-gas welded, double encapsulation constructed of Type 304 stainless steel which measures 22.0 mm (0.868") in diameter x 105 mm (4.13") long. Monsanto Research Corporation Drawing No. A24173-AA00 is attached.
3. Radioactive Contents - This source consists of not more than 2.04 TBq (55 Ci) of Pu-238 as an oxide powder mixed with a neutron producing target.
4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 209 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 and consignees in the United States exporting or importing shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.
5. Expiration Date - This certificate expires March 31, 2001.

This certificate is issued in accordance with paragraph 703 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the petition and information dated February 22, 1996 submitted by Halliburton Energy Services, Houston, TX, and in consideration of other information on file in this Office.

Certified by:

  
Alan I. Roberts  
Associate Administrator for Hazardous Materials Safety

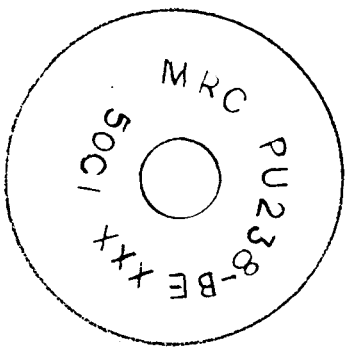
APR - 1 1996

(DATE)

Revision 2 - Issued to extend the expiration date.

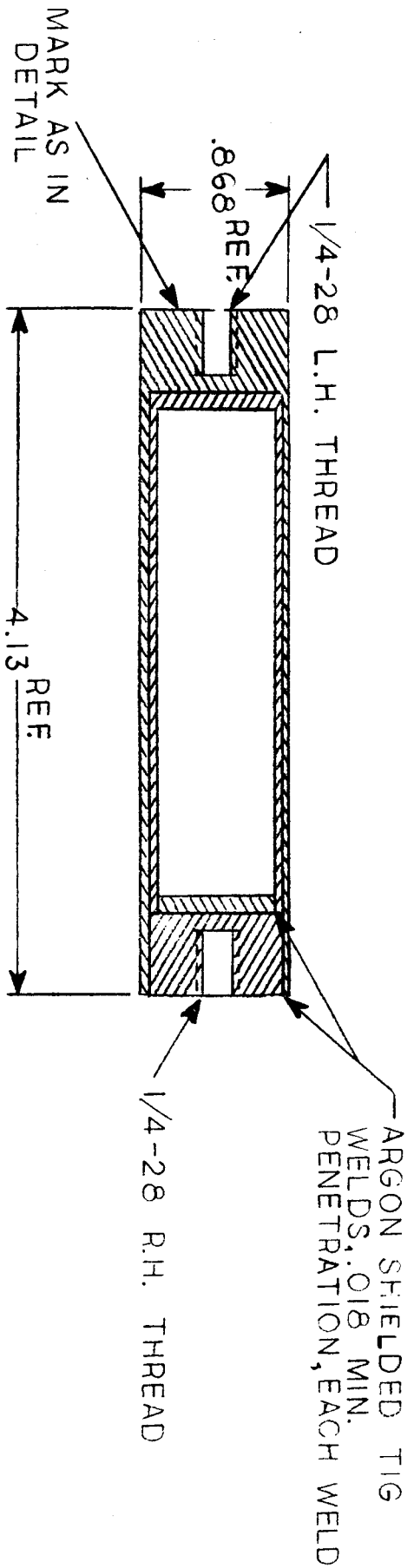
1 "Safety Series No. 6, Regulations for the Safe Transport of Radioactive Materials, 1985 Edition, as amended 1990", published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

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



DETAIL

REVISIONS				DE	MFG	QA
ZONE	SYM	DESCRIPTION	DATE	APPROVAL		



DWG. NO.

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES

TOLERANCES:

DECIMALS

.XX = ±.01

.XXX = ±.005

.XXXX BASIC

ALL SURFACES

MATERIAL 304 ST. STEEL

FINISH

FRACTIONS ±1/64

ANGLES ±30'

APPD			
QA APPD	Sd	4/6/80	
MFG APPD	ET	4/2/80	
DE APPD	ETg	4-2-80	
CHECKED			
DRAWN	HAM	3-20-80	
SIGNATURE			

MONSANTO RESEARCH CORPORATION  
DAYTON LABORATORY  
DAYTON, OHIO

MODEL 24173 NEUTRON SOURCE

SCALE WT CALC ACT. CODE IDENT NO. 038-7A0

DWG NO. A24173-AA00

SHEET 3 OF 3

REV