



U.S. Department
of Transportation

Pipeline and
Hazardous Materials
Safety Administration

IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS

CERTIFICATE USA/0759/S-96, REVISION 4

East Building, PHH-23
1200 New Jersey Ave, SE
Washington, D.C. 20590

This certifies that the sources described have 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 - Eckert & Ziegler Isotope Products Source Capsule Model LWD Series.
2. Source Description - Cylindrical double encapsulations made of MP35N alloy and fusion seal welded. Approximate outer dimensions are either 14.3 mm (0.56 in.) in diameter and 63.5 mm (2.50 in.) in length (Capsule 4133) or 22.0 mm (0.87 in.) in diameter and 73.3 mm (2.89 in.) in length (Capsule 4173). Construction of LWD Series Capsules shall be in accordance with attached Eckert & Ziegler Isotope Products Drawing Nos. 4133-REG, Rev. A, Sheet 1 of 1 or 4173-REG, Rev. ---, Sheet 2 of 2.
3. Radioactive Contents - No more than 740 GBq (20 Ci) of Americium-241. The Am-241 is in the form of an oxide mixed with beryllium, compressed as a pellet in a metal matrix.
4. Management System Activities - Records of Management System activities required by Paragraph 306 of the IAEA regulations 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 requirements of Subpart H of 10 CFR 71.

¹ "Regulations for the Safe Transport of Radioactive Material, 2012 Edition, No. SSR-6" 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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5. Expiration Date - This certificate expires on May 31, 2028. Previous editions which have not reached their expiration date may continue to be used.

This certificate is issued in accordance with paragraph(s) 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the April 28, 2023 petition by Eckert & Ziegler Isotope Products, Valencia, CA, and in consideration of other information on file in this Office.

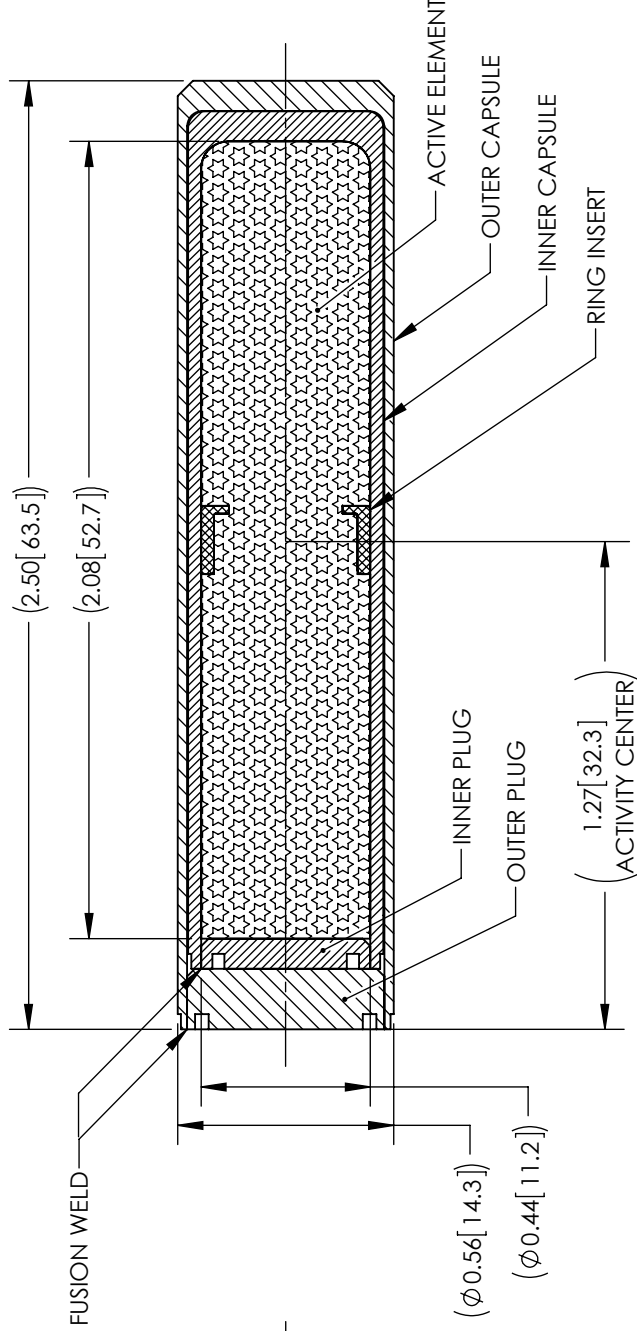
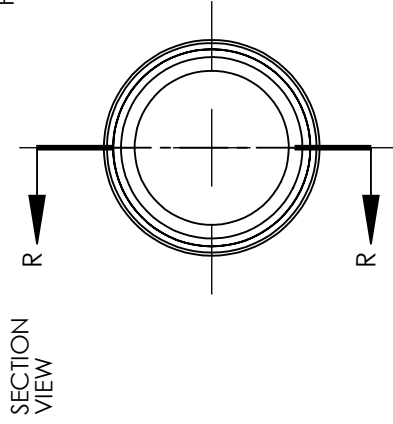
Certified By:



May 04, 2023
(DATE)

 William Schoonover
Associate Administrator for Hazardous
Materials Safety

Revision 4 - Issued to extend the expiration date and update EZIP
Drawing No. 4173-REG, REV. ---.



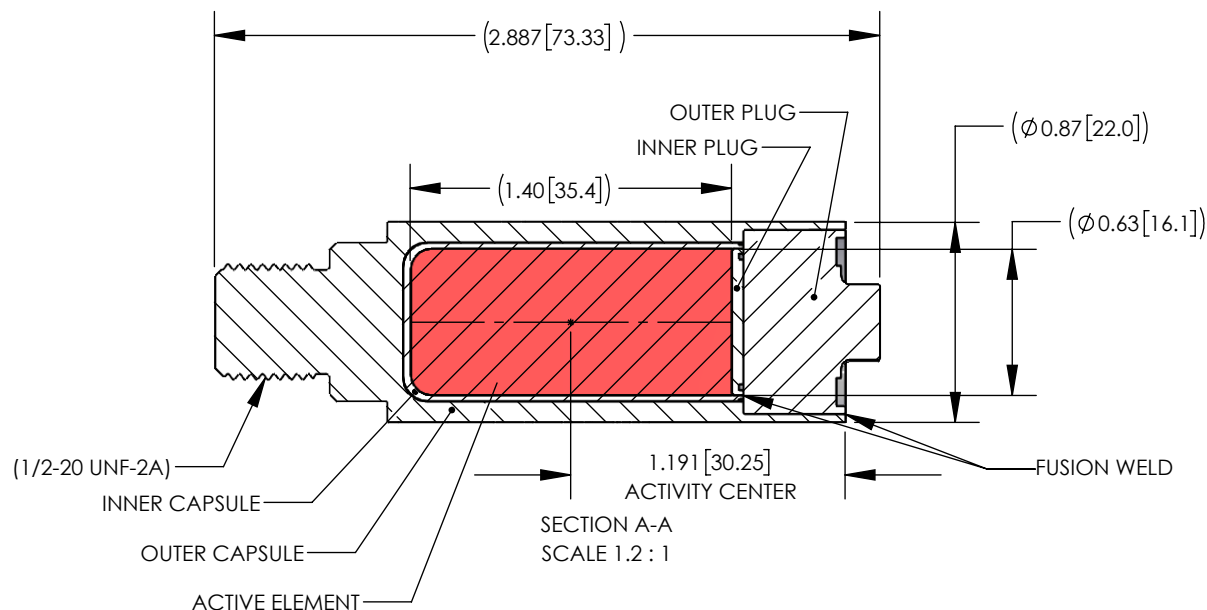
MINIMUM CAPSULE ENGRAVING:
"RADIOACTIVE" OR
RADIATION SYMBOL,
NUCLIDE ACTIVITY,
SERIAL NO.,
MANUFACTURER, MODEL NO.

ON REVERSE SIDE OF SOURCE
(NOT SHOWN):
TREFOIL SYMBOL AND/OR WORDING,
"DANGER (OR CAUTION) RADIOACTIVE
MATERIAL"

SECTION R-R

NUCLIDE ACTIVITY
SERIAL NO. _____
MANUFACTURER XXXXXX

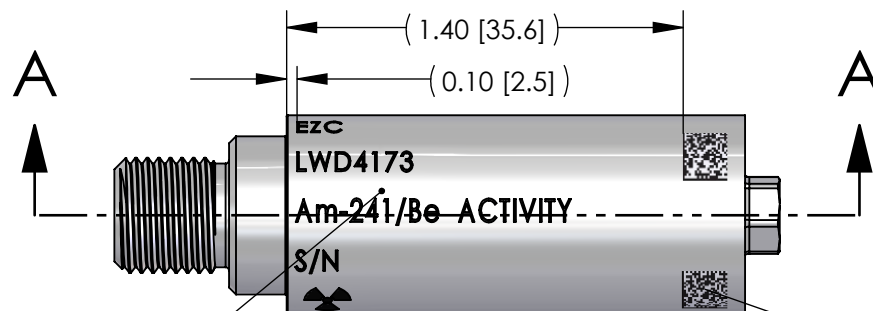
 Eckert & Ziegler Isotope Products VALENCIA, CALIFORNIA 91355	CAGE CODE 32993		DRAWING SIZE	LETTER	DRAWN	TITLE	
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCH SIZES. METRIC UNITS [mm] ARE IN MILLIMETERS.				KP ME/CHECKER JH	MODEL LWD SERIES (CAPSULE 4133)	
	TOLERANCES (UNLESS OTHERWISE SPECIFIED) X.XXX ± .002 INCH ANGULAR TOLERANCE OF 0°±30' X.XX ± .005 INCH FRACTIONAL DIMENSIONS ± 1/32" X.X ± .03 INCH REFERENCE DIMENSIONS [I] N/A X. ± .1 INCH SURFACE ROUGHNESS [INCH] MAX				ENGINEER KP SCALE 2:1	SERIES TITLE OIL WELL LOGGING (Am-Be GROUP)	
	THIS DRAWING IS THE PROPERTY OF ECKERT & ZIEGLER ISOTOPE PRODUCTS AND MAY NOT BE USED, REPRODUCED, PUBLISHED OR DISCLOSED TO OTHERS WITHOUT EXPRESS AUTHORIZATION BY ECKERT & ZIEGLER ISOTOPE PRODUCTS.		DRAWING NO. 4133-REG		REV A	SHEET 1 OF 1	



2. 3.

EZC
LWD4173
Am-241/Be ACTIVITY
S/N

RAD. TREFOIL
DANGER RADIOACTIVE MATERIAL
DO NOT HANDLE. IF FOUND
NOTIFY HALLIBURTON
OR CIVIL AUTHORITIES



IDENTIFY PART PER HES SPECIFICATION:
D00760942, METHOD 7
(4 PLACES, 90° APART)

P/N A4173-1 Am-241/Be NEUTRON-SOURCE LWD4173
(HALLIBURTON)



Eckert & Ziegler
Isotope Products

VALENCIA, CALIFORNIA 91355

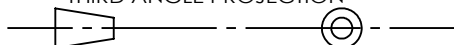
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCH-
SIZES. METRIC UNITS [mm] ARE IN MILLIMETERS.

TOLERANCES (UNLESS OTHERWISE SPECIFIED)

X.XXX	± .002	INCH	ANGULAR TOLERANCE OF 0°±30'
X.XX	± .005	INCH	FRACTIONAL DIMENSIONS ± 1/32"
X.X	± .03	INCH	REFERENCE DIMENSIONS () N/A
X.	± .1	INCH	SURFACE ROUGHNESS μINCH MAX

ALL DIMENSIONS ARE FINISHED DIMENSIONS

THIRD ANGLE PROJECTION



DRAWN
JR

ME/CHECKER
KDM

ENGINEER
JR

SCALE
NONE

SIZE
A

TITLE

Am-241/Be NEUTRON-SOURCE LWD4173

SERIES TITLE

OIL WELL LOGGING (Am-Be GROUP)

CAGE CODE
32993

DRAWING NO.

4173-REG

REV
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SHEET
2 OF 2

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CERTIFICATE NUMBER: USA/0759/S-96

ORIGINAL REGISTRANT(S) :

Eckert & Ziegler Isotope Products
24937 Avenue Tibbitts
Valencia, CA, 91355
USA