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

U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS

CERTIFICATE USA/0767/S-96, REVISION 2

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[1] and the United States of America[2] for the transport of radioactive material.

1. Source Identification - QSA Global, Inc. Model X.220 (Manufactured on or after April 1, 1981).

2. Source Description - Cylindrical double encapsulation made of stainless steel and tungsten inert gas seal welded. Approximate exterior dimensions are 9.14 mm (0.36 in.) in diameter and 14.73 mm (0.58 in.) in length. Minimum wall thickness of the outer encapsulation is 0.57 mm (0.02 in.). Construction shall be in accordance with attached AEA Technology QSA, Inc. Drawing No. RBA10036, Rev. A.

3. Radioactive Contents - No more than 4.6 GBq (124.2 mCi) of Americium-241 and 4.6 GBq (124.2 mCi) of Cesium-137. The Am-241 is in the form of an oxide mixed with a beryllium powder that is then pressed into a solid pellet. The Cs-137 is a cesium silicate formed in a glass matrix. Ceramic fiber packing material is inserted between the Am-241:Be and the Cs-137.

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.

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[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 August 31, 2023. 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 August 1, 2018 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:

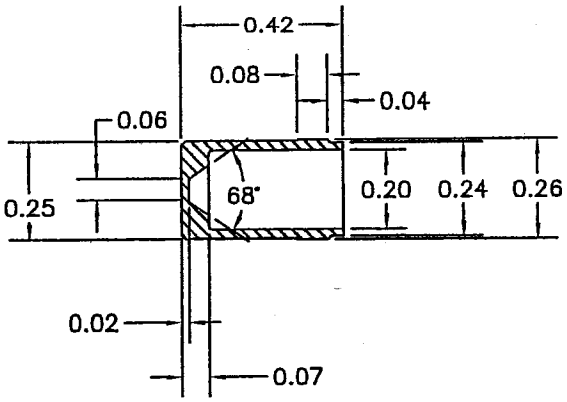
William Schoonover
Associate Administrator for Hazardous Materials Safety

September 04, 2018
(DATE)

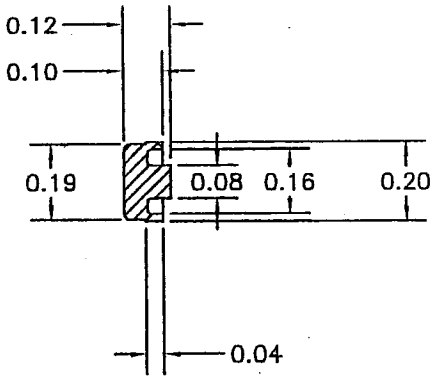
Revision 2 - Issued to extend the expiration date.

Item No	Description	No off
1	SHEATH BODY STAIN.STL.	1
2	SHEATH LID STAIN.STL.	1
3	CELL BODY STAIN.STL.	1
4	CELL LID STAIN.STL.	1
5	0.08 DIA BEAD- SEE NOTE	1
6	CERAMIC FIBRE PACKING DISC	A/R
7	ACTIVE MATERIAL -AmBe	A/R

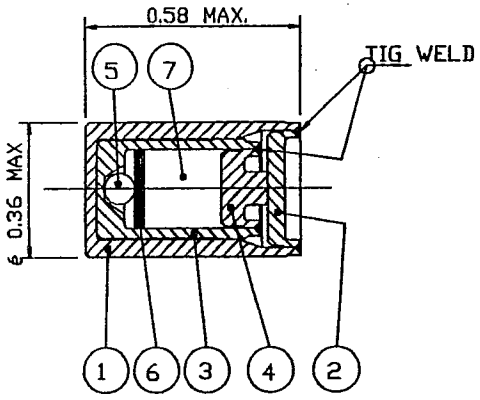
NOTE:
ITEM 5 MATERIAL
Cs-137 BONDED IN GLASS



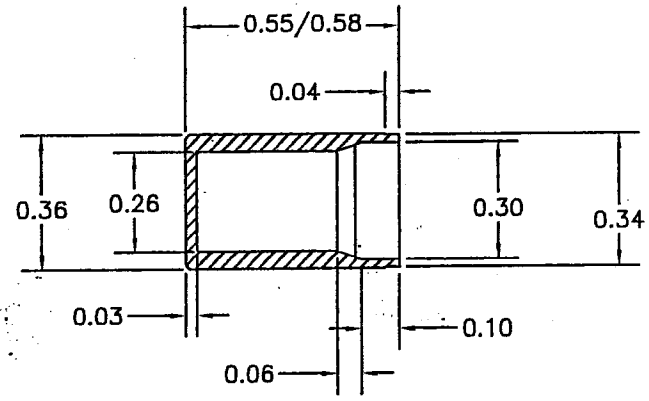
3 CELL BODY



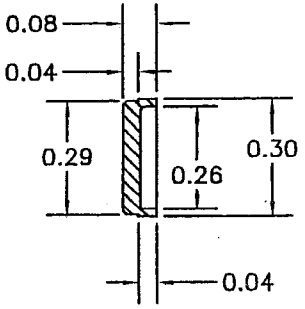
4 CELL LID



X220 ASSEMBLY



1 SHEATH BODY



2 SHEATH LID

APPROVALS	
R. Mumm	10 Mar 04
K. Pollard	10 March 04

AEATECHNOLOGY QSA
40 NORTH AVE, BURLINGTON, MA 01803

DESCRIPTIVE DRAWING

DIMENSIONS IN INCHES
TOLERANCES:
FRACTIONS ±1/32
X ± 0.1
XX ± 0.05
XXX ± 0.005

TITLE X220 CAPSULE ASSEMBLY

SIZE	DWG. NO.	REV
A	RBA10036	A
	SCALE: NONE SHEET 1 OF 1	

ERF #	772

U.S. Department of
Transportation

**Pipeline and
Hazardous Materials
Safety Administration**

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1200 New Jersey Ave, SE
Washington, D.C. 20590**

CERTIFICATE NUMBER: USA/0767/S-96

ORIGINAL REGISTRANT(S):

QSA Global, Inc.
30 North Avenue
Burlington, MA, 01803
USA

Troxler Electronic Laboratories
P.O. Box 12057
3008 Cornwallis Road
Research Triangle Park, NC, 27709
USA