



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

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

February 10, 2020

Dr. James M. Shuler  
Manager, Packaging Certification Program  
Department of Energy  
U.S. Department of Energy  
1000 Independence Ave, SW  
EM-60  
Washington, DC, 20585  
USA

Dear Dr. James M. Shuler,

As your February 5, 2020 letter requested, Department of Energy has been registered as a user of IAEA Certificate of Competent Authority USA/0627/S-96 for the QSA Global, Inc. Model No. X.2084 (Manufactured on or after July 28, 1983). The source described in the attached certificate has demonstrated its ability to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the United States of America and the International Atomic Energy Agency.

A copy of the certificate is enclosed. All future revisions of the certificate will be forwarded to Department of Energy at [James.Shuler@em.doe.gov](mailto:James.Shuler@em.doe.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Richard W. Boyle".

Richard W. Boyle, Chief  
Radioactive Materials Branch  
Office of Engineering and Research



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IAEA CERTIFICATE OF COMPETENT AUTHORITY  
SPECIAL FORM RADIOACTIVE MATERIALS

CERTIFICATE USA/0627/S-96, REVISION 4

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 - QSA Global, Inc. Model No. X.2084 (Manufactured on or after July 28, 1983).
2. Source Description - Cylindrical double encapsulation made of stainless steel and tungsten inert gas or laser seal welded. Approximate outer dimensions are 9.1 mm (0.36 in.) in diameter and 12.8 mm (0.5 in.) in length. Minimum wall thickness of the sheath body is 0.95 mm (0.04 in.) and of the cell body is 0.85 mm (0.03 in.). Construction shall be in accordance with attached AEA Technology QSA, Inc. Drawing No. RBA61685, Rev. A.
3. Radioactive Contents - No more than 5.55 GBq (0.15 Ci) of Americium-241. The Am-241 is in solid oxide form and mixed with beryllium.
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.
5. Expiration Date - This certificate expires on August 30, 2022. Previous editions which have not reached their expiration date may continue to be used.

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<sup>1</sup> "Regulations for the Safe Transport of Radioactive Material, 2012 Edition, No. SSR-6" 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/0627/S-96, REVISION 4**

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 14, 2017 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:



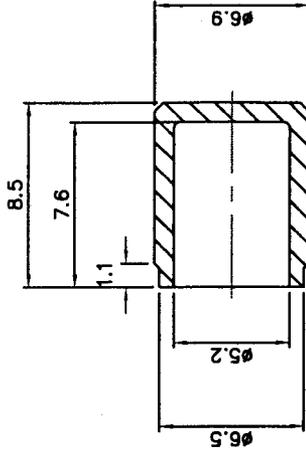
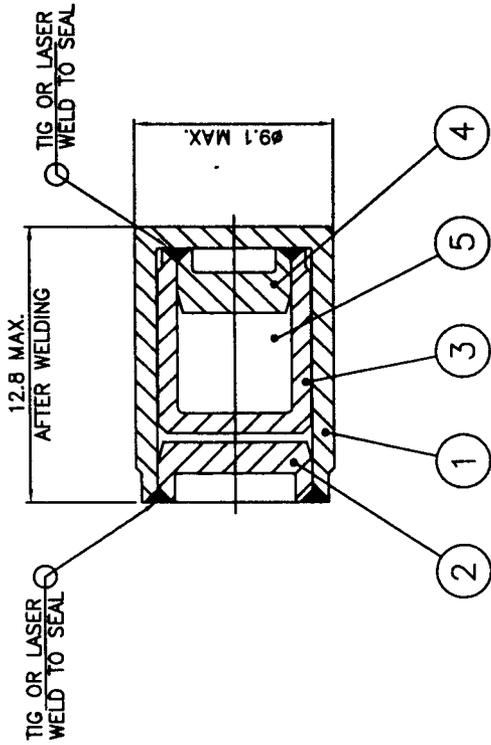
August 29, 2017

(DATE)

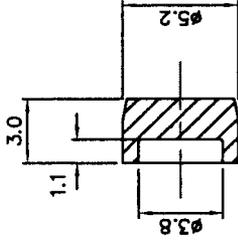
 William Schoonover  
Associate Administrator for Hazardous  
Materials Safety

Revision 4 - Issued to extend the expiration date

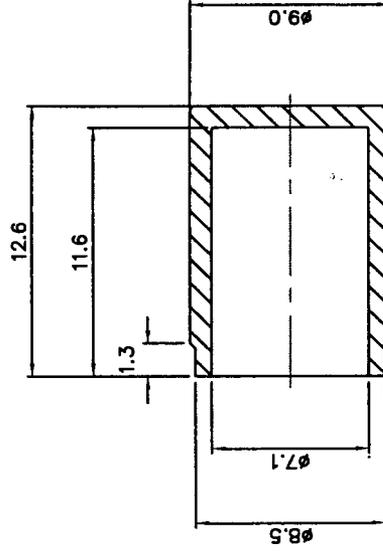
ITEM No.	DESCRIPTION	QTY.
1	SHEATH BODY STAIN.STL	1
2	SHEATH LID STAIN.STL	1
3	CELL BODY STAIN.STL	1
4	CELL LID STAIN.STL	1
5	ACTIVE MATERIAL	AR



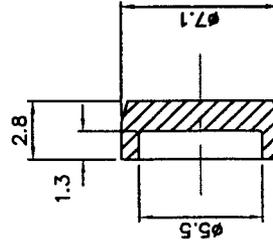
ITEM 3



ITEM 4



ITEM 1



ITEM 2

<b>AEATECHNOLOGY</b> GSA		<b>DESCRIPTIVE DRAWING</b>	
40 NORTH AVE., BURLINGTON, MA 01803		<b>TITLE</b> X2084 CAPSULE ASSEMBLY	
APPROVALS		<b>SIZE</b> DWG. NO. RBA61685	
<i>[Signature]</i>	JSMAR03	DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE STATED TOLERANCES: X ±0.5 X.X ±0.1 X.XX ±0.05 ANGULAR ±5°	
<i>[Signature]</i>	3M.S-03		
INTERNAL <input checked="" type="checkbox"/> EXTERNAL <input checked="" type="checkbox"/>		<b>REV</b> A	
SCALE: NONE		<b>SHEET</b> 1 OF 1	

ERF # 475



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**CERTIFICATE NUMBER:** USA/0627/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

U.S. Geologic Survey  
Idaho Water Science Center, U.S. Geological Survey  
Department of Interior  
1955 N Fremont MS 4131  
Idaho Falls, ID, 83415  
USA

**REGISTERED USERS:**

Department of Energy  
U.S. Department of Energy  
1000 Independence Ave, SW  
EM-60  
Washington, DC, 20585  
USA

U.S. Army Corps of Engineers  
USACE Huntsville Center - Environmental and Munitions Center of Expert  
721 19th St.  
Denver, CO, 80202  
USA