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

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

**IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE NUMBER USA/0350/S, REVISION 5**

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 United States of America[2] for the transport of radioactive materials.

1. Source Identification - Isotope Products Laboratories (IPL) Model 343.

2. Source Description - Cylindrical single encapsulation made of Type 304 or 304L stainless steel and fusion welded. Approximate outer dimensions are 9.53 mm (0.375 in.) in diameter and 7.87 mm (0.31 in.) in length. One end has a recessed hexagonal socket. Construction shall be in accordance with attached Isotope Products Laboratories Drawing No. 3222, Sheet 3 of 6, Rev. B.

3. Radioactive Contents - No more than either 11.1 GBq (0.3 Ci) of Strontium-90 or 1.85 GBq (0.05 Ci) of Ruthenium-106. The Sr-90 is in a ceramic or as $SrTiO_4$ in silver. The Ru-106 is in the form of a metal plated on platinum.

4. Quality Assurance - Records of Quality Assurance activities required by paragraph 310 of the IAEA regulations[1] 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 on August 31, 2010.

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 petition and information dated July 27, 2005 submitted by Isotope Products Laboratories, Valencia, CA, and in consideration of other information on file in this Office.

Certified by:

Robert A. McGuire
for Associate Administrator for
Hazardous Materials Safety

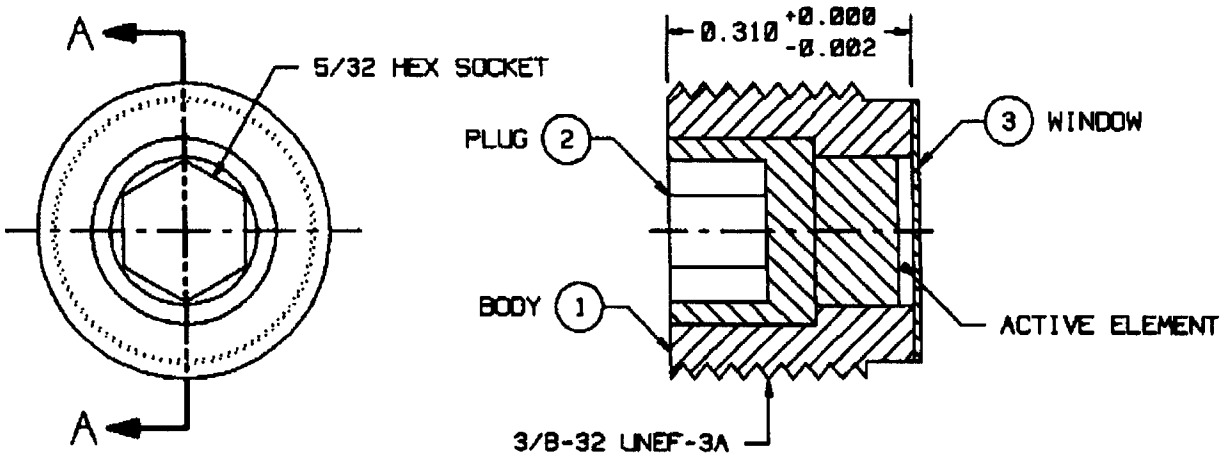
AUG 11 2005
(DATE)

Revision 5 - Issued to extend the expiration date.

---

[1] "Regulations for the Safe Transport of Radioactive Materials, 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.



SECTION A-A

2. IDENTIFY PART NUMBER
1. ASSEMBLE COMPLETE PER ENGINEERING DRAWING

NOTE: UNLESS OTHERWISE SPECIFIED

P/N: A3222 ASSEMBLY, GFS BETA CAPSULE

ISOTOPE PRODUCTS LABORATORIES BURBANK, CALIFORNIA 91504	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTION ±1/64 | DECIMAL X ± .1 | XX .01 | XXX .002 | ANGLE ±.5° THIRD ANGLE PROJECTION	DESIGN JMD/RLT	DRAWING TITLE BETA CAPSULE, GFS			
		SCALE NONE	SERIES TITLE GFS AND XFB SOURCES (PHI & BFI)			
		SIZE A	CAGE CODE 32993	REVISION B	DRAWING NUMBER 3222	SHEET 3 OF 6