

RIPON COLLEGE

Founded in 1851

Department of Physics

920-748-8144

Robert G. Gattone, Jr.
Health Physicist
Nuclear Regulatory Commission, Region III
801 Warrensville Rd.
Lisle, IL 60532-4351

5/21/03

Dear Mr. Gattone,

As you had suggested during your visit, we made arrangements to have a leak test done on our Pu-Be source. Enclosed is a copy of the leak-test report just received from SUNTRAC Services.

Best regards,

Mary Williams-Norton

Mary Williams-Norton
Professor of Physics

Cc: M. deRegnier

Send all kits and requests to:

SUNTRAC Services, Inc.
1818 East Main Street
League City, TX 77573
(281) 338-2133

ATTN: SIT-KIT

CAUTION: Conduct a survey on the outside of each package placed in the U.S. Mails. Any reading over 0.5 mR/hr at contact with the envelope or package shall not be mailed.

LEAK TEST INVENTORY/REPORT FORM

Company Name: Ripon College 13023 Attention: Mr. Layne Sessions

Address: 300 Seward City: Ripon State: WI Zip Code: 54971

Isotope: ^{239}Pu in Pu-Be source Activity: 2000 mCi (32 grams)
(when received 2/1965)

Source Serial No: (Monsanto Research) Leak Test Date: May 5, 2003

Device Serial No: (Nuclear Chicago Neutron Howitzer)

Smear Taken By: Mary Williams-Norton Mary Williams-Norton

----- DO NOT WRITE BELOW THIS LINE -----

This is to certify that the above described smear/swab has been assayed at our facilities for indication of source leakage.

Our findings show the leakage to be:

ALPHA	BETA-GAMMA
<.0001	<.0001

µCi (Wet)

Certified By: [Signature] Date: 5/9/03
SUNTRAC Services, Inc. Representative
(Texas Radioactive License No. L03062)

Revisions: November 1993
SSI-02

192803

SUNTRAC SERVICES, INC.

SEALED SOURCE INTEGRITY TEST SERVICES FORM

The Suntrac Services, Inc. SIT-1 Kit is designed for use with alpha or beta-gamma emitting sources or for low level gamma sources. It may also be used for testing large radiography gamma sources, where due to the potential radiation hazard, a smear is taken of the inside surface of the source housing, cable, etc., rather than the source capsule itself.

In special cases where a source is permanently fixed into a system, the closest and most accessible surface such as a conical port, source housings, etc., may be taken as the smear area. The kit consists of one filter cloth or cotton tipped swab in a plastic zip-lip envelope, wet with our decontamination solution.

For license approval of our service, please refer to "Suntrac Services, Inc. SIT-1 Kit" in your application to State of Texas, Division of Licensing, or the NRC Division of Licensing.

CAUTION

1. Portable survey instruments should be used during all smear testing.
2. Rubber gloves should be worn, especially when handling beta sources.
3. Always use tweezers, tongs, forceps or handles to keep all sources at least one foot away; work with your arms extended.
4. Conduct a dry-run on all beta sources in excess of 1 mCi, gamma sources on 60-Co up to 40 mCi and 137-Cs up to 150 mCi, to assure that shielding is sufficient to limit the exposure of personnel doing the test.
5. If the "wet" patch/swab dries out, it should be moistened by adding 1/2 cc of water, which renews its effectiveness for testing.

TO PERFORM TEST

1. Remove the source from its container and place it in a shielded area. (In those cases where it is impractical to remove a permanently fixed source from a special container, it is acceptable to make the smear on an accessible area adjacent to the source; for example, inside a conical beaming port. The source should be kept shielded while smearing the area.)
2. Remove the wet filter cloth/swab from its envelope (by using the zip-lip opening) and thoroughly smear the source or the area of the source container which contacts the source.
3. Replace this smear in the plastic envelope provided and reseal the zip-lip opening.
4. Place the plastic envelope, along with the "Leak Test Request and Report Form", in the supplied, self-addressed envelope and mail to Suntrac Services, Inc.
5. Upon receipt of your completed data sheet and smears from your test, Suntrac Services, Inc. will perform the necessary assay and evaluation and will issue a certification of the results. The certificate should be retained for review by the Texas State Compliance Division or your licensing authority upon request.

Revisions: August 1994