

The Bruce Williams Laboratories, Inc.

MAIN OFFICE AND LABORATORIES BOX 169 TELEPHONE 623-1556

ENGINEERING
FOUNDATIONS
INSPECTIONS
ANALYSES
SAMPLING
CONSULTING
RESEARCH

ESTABLISHED 1988

Joplin, Missouri

64802

April 24, 1986

United States Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

Attention: D.J. Sreniawski, Chief
Nuclear Materials Safety, Section 2

RE: License Inspection Findings
Conducted January 23 and 24, 1986
License No. 24-20009-01

Gentlemen:

This letter is in response to the inspection findings recorded on January 23 and 24, 1986, by Mr. Bill Reichhold of your office.

Finding #1: On February 25, 1986, our personnel completed the device manufacturer's training course at our office in Joplin, Missouri. The course was presented by Mr. Jim Wandell, Central Branch Manager, Troxler Electronics Laboratories, Inc., Central Branch, 37635 N. Route 59, Lake Villa, Illinois, 60046, telephone 312-587-7273. This action is considered to have brought us into compliance.

Personnel completing course;
Anderson, Larry
Ellis, Karen
Maxwell, Jim
Tarnowiecky, Siegfried
Trenberth, Kenneth
Warman, Michael
Warnke, John

Finding #2: All personnel who are using the licensed material possess and use film badges as personnel monitoring devices. Find attached a copy of a current Radiation Exposure Report.

8605080132 860502
REG3 LIC30
24-20009-01 PDR

APR 28 1986

RE: License Inspection Findings
Conducted January 23 and 24, 1986
License No. 24-20009-01

Finding #3: A request for a modification of the original license is being performed to reflect the three addresses where licensed materials may be stored;

620 Joplin Street
Joplin, MO

614 Wall Street
Joplin, MO

2332 A. E. Division Street
Springfield, MO

Finding #4: A system has been established where each sealed source containing licensed material will be tested for leakage at intervals of 6 months. Please find attached copies of the latest leak test results.

Finding #5: a) Each sealed source containing licensed material when transported is accompanied by a shipping paper; an example is attached.
b) Each sealed source containing licensed material when transported are transported in approved packages, and these packages are blocked and braced so they cannot change position during transport.

Finding #6: A physical inventory is being conducted every 6 months to account for all licensed material received and possessed under the license.

Very Truly Yours,
BRUCE WILLIAMS CONSULTING ENGINEERS, INC.

Siegfried Tarnowiecky

Siegfried Tarnowiecky
Manager

ST:dc

SIEMENS

Siemens Corporation, Inc.
Health Physics Division
2000 Nuclear, Lincoln 68018-0001
Phone 1-800-333-3333
Telex 17-9040

*Made copy for
Larry E. Port*

Radiation Exposure Report

ACCREDITED BY THE
NATIONAL BUREAU OF STANDARDS
THROUGH NPLAP

Form No. 1475-1-200



To:		Shipped To:		Customer Number	Report Printed	Recitation Level	Freq.	Standard Exposure Period
BRUCE WILLIAMS CONSULTING ENGINEERS INC. 620 JOPLIN ST PO BOX 169 JOPLIN MO 64801		BRUCE WILLIAMS CONSULTING ENGINEERS INC. 620 JOPLIN ST PO BOX 169 JOPLIN MO 64801		86731	04/01/86	2	1 MONTH	
64801		64801		391	03/23/86			1021

When making inquiries about this exposure report,
refer to the customer and process number.

			Current Monitoring Period										Quarter to Date				Year to Date		Life Time Whole Body	Unused Permissible Dose	Birth Date and Sex	Service Start Date
			Start Date (Badge Date)	Z-0-6	F-10-6 Remaining	X-10-6 Non-Penetrating	Neutron	Whole Body (3-11)	Skin (3-10+11)	Whole Body	Skin	Whole Body	Skin	17	18	19						
1	002	MAXWELL J	496667980	02/15/86	5	678	0	0	0	0	0	0	0	0	0	0	0	500	43100	091657M	07/15/85	
2	009	WARKNE J	372-27124	12/15/85	1	1	0	0	0	0	0	0	0	0	0	0	0	400	114600	101243M	07/16/85	
3	004	WARKNE J	372-27136	02/15/86	1	1	0	0	0	0	0	0	0	0	0	0	0	400	114600	101243M	07/16/85	
4	012	STEGFRIED T	491449918	02/15/86	1	1	0	0	0	0	0	0	0	0	0	0	0	320	124680	102942M	07/16/85	
5	016	ELLIS K	496703063	02/15/86	1	1	0	0	0	0	0	0	0	0	0	0	0	80	48920	090358M	01/16/86	
6	019	ELLIOFF V	530820036	02/15/86	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5000	091368M	01/16/86	
7	020	TRENGERTH K	491761985	02/15/86	1	1	0	0	0	0	0	0	0	0	0	0	0	0	15000	112864M	01/16/86	
8	021	ANDERSON L	498521304	02/15/86	1	1	0	0	0	0	0	0	0	0	0	0	0	0	100000	110447M	01/16/86	

You should keep this Report for your records.

Device Type
Exposure Type

Radionuclide: RA/BE
Source Serial: RB-4233
Inst. Model: 2401
Inst. Serial: 3693
Date of Wipe: 2-25-86
Individual's Name: Larry Anderson
Telephone: (417) 864-4734

PLEASE TYPE OR PRINT LEGIBLY -
THIS IS YOUR RETURN ADDRESS LABEL

- Bruce Williams Laboratories
- P.O. Box 169
- Joplin, MO 64802

Troxler Electronic Laboratories, Inc., P.O. Box 12057, Research Triangle Park, N.C. 27709 919/549-8661 Telex 579474

Leak Test Analysis

Removable Activity	
Beta Gamma	Alpha
<u>0</u> μCi	<u>0</u> μCi
<u>Deborah Beasley</u> Certification	
Date: <u>3-6-86</u>	

NOTES

1. Follow procedures as defined in your leak test kit instructions.
2. Fill out this form and the bag label with required information where applicable. Seal the filter paper in the plastic bag. Place the plastic bag and this form in the pre-addressed envelope.
3. Removable activity will be reported in μCi . A value of "0" indicates less than .00005 μCi .
4. Federal and state regulations require that sealed sources be removed from service and reports filed if removable activity is greater than .005 μCi .
5. Due to the potential hazard, Troxler recommends that an additional wipe be made if removable activity exceeds .0005 μCi .
6. You will be notified by telephone collect if the test yields greater than .001 μCi removable activity.

ORIGINAL

Radionuclide: RA/BE
Source Serial: RB-343
Inst. Model: 2401
Inst. Serial: 812
Date of Wipe: 2-25-86
Individual's Name: John Waruke
Telephone: (417) 864-4734

PLEASE TYPE OR PRINT LEGIBLY -
THIS IS YOUR RETURN ADDRESS LABEL

- Bruce Williams Consulting Engineers
- P.O. Box 169
- Joplin, Mo 64802

Troxler Electronic Laboratories, Inc., P.O. Box 12057 Research Triangle Park, N.C. 27709 919/549-8661 Telex 579474

Leak Test Analysis

Removable Activity	
Beta Gamma	Alpha
<u>0</u> μCi	<u>0</u> μCi
<u>Deborah Beasley</u> Certification	
Date: <u>3-6-86</u>	

NOTES

1. Follow procedures as defined in your leak test kit instructions.
2. Fill out this form and the bag label with required information where applicable. Seal the filter paper in the plastic bag. Place the plastic bag and this form in the pre-addressed envelope.
3. Removable activity will be reported in μCi . A value of "0" indicates less than .00005 μCi .
4. Federal and state regulations require that sealed sources be removed from service and reports filed if removable activity is greater than .005 μCi .
5. Due to the potential hazard, Troxler recommends that an additional wipe be made if removable activity exceeds .0005 μCi .
6. You will be notified by telephone collect if the test yields greater than .001 μCi removable activity.

ORIGINAL

Radionuclide: CE/AM/BE
Source Serial: AC-4970
Inst. Model: 2401
Inst. Serial: 3351
Date of Wipe: 2-11-86
Individual's Name: L. Anderson
Telephone: (417) 623-1556

PLEASE TYPE OR PRINT LEGIBLY -
THIS IS YOUR RETURN ADDRESS LABEL

- Bruce Williams Consulting Engineers, Inc.
- P.O. Box 169
- Joplin, MO 64802

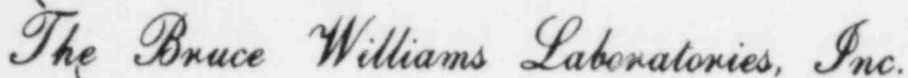
Leak Test Analysis

Removable Activity	
Beta Gamma	Alpha
<u>0</u> μCi	<u>0</u> μCi
<u>Deborah Beasley</u> Certification	
Date: <u>2-19-86</u>	

NOTES

1. Follow procedures as defined in your leak test kit instructions.
2. Fill out this form and the bag label with required information where applicable. Seal the filter paper in the plastic bag. Place the plastic bag and this form in the pre-addressed envelope.
3. Removable activity will be reported in μCi . A value of "0" indicates less than .00005 μCi .
4. Federal and state regulations require that sealed sources be removed from service and reports filed if removable activity is greater than .005 μCi .
5. Due to the potential hazard, Troxler recommends that an

ORIGINAL



MAIN OFFICE AND LABORATORIES BOX 169 TELEPHONE 623-1556

ESTABLISHED 1898

64802

LICENSED MATERIAL SHIPPER

RADIOACTIVE MATERIAL
SPECIAL FORM, N.O.S., UN 2974
TYPE A PACKAGE
RADIOACTIVE "YELLOW II"
TRANSPORT INDEX 0.1

LICENSED MATERIAL DATA

Radionuclide:
Source Serial:
Inst. Model:
Inst. Serial:
Activity:
Type of Radiation:
Neutron Output:

Shipped FROM: 614 Wall Street
Joplin, MO 64801
call 417-623-1556
Siegfried Tarnowiecky

Shipped
To: _____

Technician
Carrier

Time
Out IN

Date _____
OUT IN _____

[illegible]

This shipping paper to accompany each source and to be carried on the front seat of the vehicle in a plastic container.

Siegfried Tarnowiecky
Manager