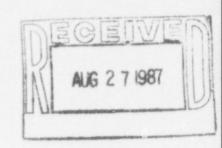
A. B. STILL WEL-SERVICE, INC.

P. O. Box 1198

Phone (918) 352-3533

DRUMRIGHT, OKLAHOMA 74030

August 21, 1987



U.S.Nuclear Regulatory Commission Region IV 611 Ryan Plaza Drive Suite 1000 Arlington, Texas 76011

Attention: Mr. William L. Fisher

Re: License 35-19935-01
Appendix to your letter dated
June 29, 1987
Notice of Violation
Section 1 and Section 3-A

Gentlemen:

Regarding repeat Violation of Section 1 we have appointed Michael Blevins to the job of making these surveys for each job performed. A, B. Still will audit these surveys at intervals of 90 days to insure they are properly performed.

We are enclosing a complete set of DOT certifications for transportation carriers for each nuclear source we possess. In addition, we are re-including certification of the source carriers.

We hope this will satisfy the requirements stated in your letter dated August 17,1987.

Respectfully,

A. B. STILL WEL-SERVICE, INC.

ABS:ss encls

8709030405 870821 REG4 LIC30 35-19935-01 PDR

JE 07

IC-87/236



GAMMATRON INC.

P.O. BOX 34042 . HOUSTON, TEXAS 77034 . AREA CODE 713/641-0391

SEALED SOURCE CERTIFICATE

1.	PURCHASER A.B. STILL WEL-SERVICE P.O. # A.B. STILL
2.	MANUFACTURER GAMMATRON, INC.
3.	MODEL AN-HP SERIAL # C-097
4.	ACTIVE MATERIAL Am-241 Be
	MAXIMUM CONTENT 360 mCi
	MINIMUM CONTENT 330 mC1
	ACTUAL CONTENT BASED ON WEIGHT INPUT AND CI/GRAM AS SUPPLIED BY ORNL ± 1% 350 mCi
	YIELD:
	STD
	GAMMATRON STD1.04 X 10 ⁶ NPS
	SERIAL # 1.08 X 106 NPS
5.	THIS IS TO CERTIFY THAT THIS SOURCE MEETS THE REQUIREMENTS FOR SPECIAL FORM AS DEFINED IN DOT TITLE 49 (173.398) AND THE REQUIREMENTS OF:
	ANSI CLASSIFICATION C.44444 SIGNATURE CONC.
	TEXAS REGULATIONS PART 36.108 N/A SIGNATURE
6.	MATERIAL OF CONSTRUCTION 304SS
7.	WIPE TEST:
	OUTER CAPSULE .005 UCi DATE 9/24/84
	BY I C Jone
8.	HELIUM TEST NEG NNER NEG OUTER
9.	PRESSURE TEST N/A WT. N/A FINAL OUT
0.	CONTAINER WIPE TEST
1.	TYPE 7A SERIAL # N/R
2.	SURFACE 18 INDEX 9 LABEL II

PMC

D.O.T. CERTIFICATION TEST

MODEL CAA-1

. . DESCRIPTION I. CAA-1 is a polymerized propylene thermoplastic in cylindrical shape with variable dimensions. A thread hole accommodates an AmBe source that has been threaded. The hole is covered by a permanent metal source tag. RADIOACTIVE CONTENTS II. Radioactive Material, Special form, NOS, UN2974 For shipping radioactive materials. III. TEST PROCEDURES Water Spray Test: simulated exposure to rainfall 4.1. approximately 2 inches per hour for 2 hours. Visual Inspection: showed no damage. 4.1.1. Free Drop Test: measuring from the bottom of 4.2. the container to the target (flat unyielding surface). The height of not less than 5.5'. Visual Inspection: showed no apparent damage. 4.2.1. Corner Drop Test: a free drop onto each quarter of each rim from a height of 1'. Visual Inspection: showed no apparent damage. 4.3.1. Compression Test: the test lasted 24 hours and 4.4. and consisted of a compressive load equivalent to 225 lbs/ft 2 multiplied by the vertically projected

age normally stands.

distance of 3.3'.

4.4.1.

4.5.

areas of the package. The load was applied to two opposite sides of the mackage one of which the pack-

Penetration Test: a bar weighing 15 lbs., 1.25" in

diameter with a hemispherical end was dropped onto the cente: of the weakest part of the package from a

Visual Inspection: showed no apparent damage.

4.5.1. Visual Inspection: showed no apparent damage.

WITNESSED:

Kent Gung

Radiography Supervisor

6-27-85

Dated

Mike Bevill Sales Representative

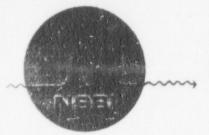
6-27-85 Dated



GAMMAIRON INC.

SEALED SOURCE CERTIFICATE

	SEALED SOURCE CERT	TIFICATE
1.	PURCHASER A.B. STILL WEL-SERVICE	P.O. # A.B. STILL
2.	MANUFACTURER GAMMATRON, INC.	VIALL
3.	MODEL AN-HP SERIAL #_	C-100
4.	ACTIVE MATERIAL Am-241 Be	V *0V
	MAXIMUM CONTENT 19.0 Ci	
	MINIMUM CONTENT 18.0 Ci	
	ACTUAL CONTENT BASED ON WEIGHT INPUT AND CI/GRAM AS SUPPLIED BY CRNL ± 1% 18.	5 Ci
	YIELD:	
	STD	
	GAMMATRON STD 8.0 X 10 ⁶ NPS	
	SERIAL # _ C-100 = 4.4 X 10 ⁷ NPS	
	THIS IS TO CERTIFY THAT THIS SOURCE MEETS THE SECOND	EMENTS FOR SPECIAL FORM AS DEFINED IN DOT
	THIS IS TO CERTIFY THAT THIS SOURCE MEETS THE REQUIRE TITLE 49 (173.398) AND THE REQUIREMENTS OF:	
	THIS IS TO CERTIFY THAT THIS SOURCE MEETS THE REQUIRE TITLE 49 (173.398) AND THE REQUIREMENTS OF:	SIGNATURE 2 Character
	THIS IS TO CERTIFY THAT THIS SOURCE MEETS THE REQUIRE TITLE 49 (173.398) AND THE REQUIREMENTS OF: ANSI CLASSIFICATION	
· .	THIS IS TO CERTIFY THAT THIS SOURCE MEETS THE REQUIRE TITLE 49 (173.398) AND THE REQUIREMENTS OF: ANSI CLASSIFICATION	SIGNATURE 2 Character
	THIS IS TO CERTIFY THAT THIS SOURCE MEETS THE REQUIRE TITLE 49 (173.398) AND THE REQUIREMENTS OF: ANSI CLASSIFICATION	SIGNATURE 2 Character
	THIS IS TO CERTIFY THAT THIS SOURCE MEETS THE REQUIRE TITLE 49 (173.398) AND THE REQUIREMENTS OF: ANSI CLASSIFICATION	SIGNATURE & COLOR
	THIS IS TO CERTIFY THAT THIS SOURCE MEETS THE REQUIRE TITLE 49 (173.398) AND THE REQUIREMENTS OF: ANSI CLASSIFICATION	SIGNATURE SIGNATURE DATE 9/24/84
	THIS IS TO CERTIFY THAT THIS SOURCE MEETS THE REQUIRE TITLE 49 (173.398) AND THE REQUIREMENTS OF: ANSI CLASSIFICATION	SIGNATURE DATE 9/24/84
	THIS IS TO CERTIFY THAT THIS SOURCE MEETS THE REQUIRE TITLE 49 (173.398) AND THE REQUIREMENTS OF: ANSI CLASSIFICATION	SIGNATURE SIGNATURE DATE 9/24/84 OUTER
	THIS IS TO CERTIFY THAT THIS SOURCE MEETS THE REQUIRE TITLE 49 (173.398) AND THE REQUIREMENTS OF: ANSI CLASSIFICATION	SIGNATURE SIGNATURE DATE 9/24/84 OUTER
	THIS IS TO CERTIFY THAT THIS SOURCE MEETS THE REQUIRE TITLE 49 (173.398) AND THE REQUIREMENTS OF: ANSI CLASSIFICATION	SIGNATURE SIGNATURE DATE 9/24/84 OUTER
	THIS IS TO CERTIFY THAT THIS SOURCE MEETS THE REQUIRE TITLE 49 (173.398) AND THE REQUIREMENTS OF: ANSI CLASSIFICATIONE.56535 TEXAS REGULATIONS PART 36.108 PASSED MATERIAL OF CONSTRUCTION17-4SS WIPE TEST: INNER CAPSULEN/A OUTER CAPSULE0004 uCi BY HELIUM TESTNEGINNERNEG PRESSURE TEST25.000 PSIWTPASSED	SIGNATURE DATE 9/24/84 OUTER FINAL OUT



NUCLEAR SOURCES & SERVICES, INC.

P. O. BOX 34042

HOUSTON, TEXAS 77034

AREA CODE 713/641-0391

POR CAMPATRON INC. DOT 7A CONTAINER

MODEL 85455-B (Dresser)

- 1). Common Name of Container
 Neutron source shipping container.
- 2). Authorized Use
 Multiple trip, neusable container.
- Authorized Contents
 Type "A" quantities of special form radicactive materials.
- 4). Dimensions
 Total length 21", height 19", 184" diameter.
- Oylindrical shaped, 1/8" thick carbon steel shell, coned at ends to 8" diameter filled with polypropylene beads and water extended polymer (WEP) shielding, stainless steel inner cavity.
- 6). Specifications and Restrictions
 - a. Marking must be in compliance with CFR 49 173.24(c)(1).
 - A seal must be provided as required in CFR 49 173.412 (b).
 Contamination external radiation levels and labeling must be in compliance with CFR 49 173.443, 173.441, 173.444.

7. Test Results

Environmental Conditions

Test	Results	Discussion
a. Heat +130°F	Pass	Temperature resistance within normal operating range for materials of construction.
b. Cold -40°F	Pass	Temperature resistance within normal operating range for materials of construction.
c. Vibration	Pass	Containers have withstood years of transport with no occurrence of significant damage due to normal vibration.
d. Water Spray	Pass	Containers have withstood years of transport with no apparent weakering of integrity. CFR 49 173.465(b), CFR 49 173.461(a)(4).
e. Free Drop (4 ft.)	Pass	Container passed 4 feet drop requirement with no significant damage. CFR 49 173.465 (c)
f. Penetration	Pass	Container passed penetration test with no loss of integrity. CFR 49 173.465 (e)
g. Compression	Pass	Container passed the compression test requirement by supporting 1200 lbs. for 24 hours with no significant damage CFR 49 173.465 (d)

Test conditions and data are available for review. For additional information contact:

Robert D. Gallagher Nuclear Sources & Services, Inc. P.O. Box 34042 Houston, Texas 77034 This is to certify that Nuclear Sources & Services, Inc., has completed the test as described above on a container proveded by Nuclear Sources & Services, Inc.

Robert D. Gallagher, President Nuclear Sources & Services, Inc.

Date January 1976



GAMMAIRON INC.

SEALED SOURCE CERTIFICATE

	GAMMAIRON INC.
	P.O. BOX 34042 • HOUSTON, TEXAS 77034 • AREA CODE 713/641-0391
	SEALED SOURCE CERTIFICATE
1.	PURCHASER A.B. STILL WEL-SERVICE INC. P.O. #A.B. STILL 14820 7/18/84
2.	MANUFACTURER GAMMATRON, INC.
3.	MODELAN-HP SERIAL # C-034
4.	ACTIVE MATERIAL Am-241 Be
	MAXIMUM CONTENT _5_Ci
	MINIMUM CONTENT 4.6 Ci
	ACTUAL CONTENT BASED ON WEIGHT INPUT AND CI/GRAM AS SUPPLIED BY ORNL ± 1% 4.95 Ci
	YIELD:
	STD
	GAMMATRON STD 8.0 X 10 ⁶ NPS
	SERIAL # _C=034 = 1.09 x 107 NPS
5.	THIS IS TO CERTIFY THAT THIS SOURCE MEETS THE REQUIREMENTS FOR SPECIAL FORM AS DEFINED IN DOT TITLE 49 (173.398) AND THE REQUIREMENTS OF:
	ANSI CLASSIFICATION E. 56535 SIGNATURE TO SIGNATURE
	TEXAS REGULATIONS PART 36.108 PASSED SIGNATURE
	MATERIAL OF CONSTRUCTION 17-4SS
	WIPE TEST:
	INNER CAPSULE N/A
	OUTER CAPSULE < .0005 uCi DATE 7/19/84
	BY - \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	HELIUM TEST NEG INNER NEG OUTER
	PRESSURE TEST 25,000 PSI WT. PASSED FINAL OUT
	CONTAINER WIPE TEST < 0005 uCi
	TYPE 7A SERIAL # CUSTOMER
	SURFACE 110 INDEX 6 LABEL III



NUCLEAR SOURCES & SERVICES, INC.

P. O. BOX 34042

HOUSTON, TEXAS 77034

AREA CODE 713/641-0351

POR GAMMATRON INC. DOT 7A CONTAINER

MODEL 100-084

- Common Name of Container
 Neutron source shipping shield.
- 2). Authorized Use
 Multiple trip, reusable container.
- 3). Authorized Contents

 Type "A" quantities of special form radioactive materials.
- 4). Dimensions
 14½" diameter, 16" length, height 16½"
- 5). Description of Container

 Cylindrical shaped, 1/8" thick carbon steel shell, coned at ends to 5" diameter, filled with polypropylene beads, and water extended polymer (WEP) for shielding.
- 6). Specifications and Restrictions
 - a. Marking must be in compliance with CFR 49 173.24(c)(i).
 - b. A seal sust be provided as required in CFR 49 173.412 (b).
 - c. Contamination external radiation levels and labeling must be in compliance with CFR 49 173.443, 173.441, 173.444.

^{*} See Model D-5477-L for photo type documentation of required tests.

7. Test Results

Environmental Conditions

Test	Results	Discussion
a. Heat +130°F	Pass	Temperature resistance within normal operating range for materials of construction.
b. Cold -40°F	Pass	Temperature resistance within normal operating range for materials of construction.
c. Vibration	Pass	Containers have withstood years of transport with no occurrence of significant damage due to normal vibration.
d. Water Spray	Pass	Containers have withstood years of transport with no apparent weakening of integrity. CFR 49 173.465(b), CFR 49 173.461(a)(4).
e. Free Drop (4 ft.)	Pass	Container passed 4 feet drop requirement with no significant damage. CFR 49 173.465 (c)
f. Penetration	Pass	Container passed penetration test with no loss of integrity. CFR 49 173.465 (e)
g. Compression	Pass	Container passed the compression test requirement by supporting 1000 lbs. for 24 hours with no significant damage CFR 49 173.465 (d)

Test conditions and data are available for review. For additional information contact:

Robert D. Gallagher Nuclear Sources & Services, Inc. P.O. Box 34042 Houston, Texas 77034 This is to certify that the DOT 7 A container described above has been tested and meets the requirements for 7A packaging.

Robert D. Gallagher, President Nuclear Sources & Services, Inc.

Date: 8-25-75

OTHER CONFIGURATION:

D-5477-L (Dresser) - Fabricated the same as 100-084. Customer orders by drawing number.

1.

TRANSPORTATION CANKIER CENTIFICATE, SOURCE - ZCI. CESIUM WE HAVE TWO (2) 2 (SESSUM SOURCES DESGINATED D-20

D-21

GNI INCORPORATED

Model GC-2

Shipping Container

GC-2 CYLINDER CONTAINER

I. DESCRIPTION:

GC-2 is a cylinder container made of hot rolled mild steel, 8" in diameter and 9 3/4" in length. The bottom is welded 11 gauge HRMS with molten lead fill. The handle is 2" high and 4" wide and is made of .375 0.D. bar stock. A top locking device consists of a flat bar .250" thick, 1" wide, with .625" holes for locking the "T" bar, 10" in length.

II. LABELING:

D.O.T. 7A Radioactive materials, special form, NOS, UN2974, proper T.I. sticker, serial number tag.

III. USES:

For shipping radioactive material special form.

IV. TEST PROCEDURES:

- 4.1. Water Spray Test: simulated exposure to rainfall of approximately 2" per hour for 2 hours.
- 4.1.1. Visual Inspection: showed no damage.
- 4.2. Free Drop Test: measuring from the bottom of the container to the target (flat unyielding surface). The height of not less than 5.5'.
- 4.2.1. Visual Inspection: showed no apparent damage.
- 4.3. Corner Drop Test: a free drop onto each quarter of each rim from a height of 1'.
- 4.3.1. Visual Inspection: showed no apparent damage.
- 4.4. Compression Test: the test lasted 24 hours and consisted of a compressive load equivalent to 225 lbs/ft² multiplied by the vertically projected areas of the package. The load was applied to two opposite sides of the package, on one of which the package normally stands.
- 4.4.1. Visual Inspection: showed no apparent damage.
- 4.5. Penetration Test: a bar weighing 15 lbs., 1.25" in diameter with a hemispherical end was dropped onto the center of the weakest part of the package from a distance of 3.3'.
- 4.5.1. Visual Inspection: showed no apparent damage.

GC-2 CYLINDER CONTAINER CERTIFICATION TESTS

WITNESSED:

Kent Vaughn

Radiography Supervisor

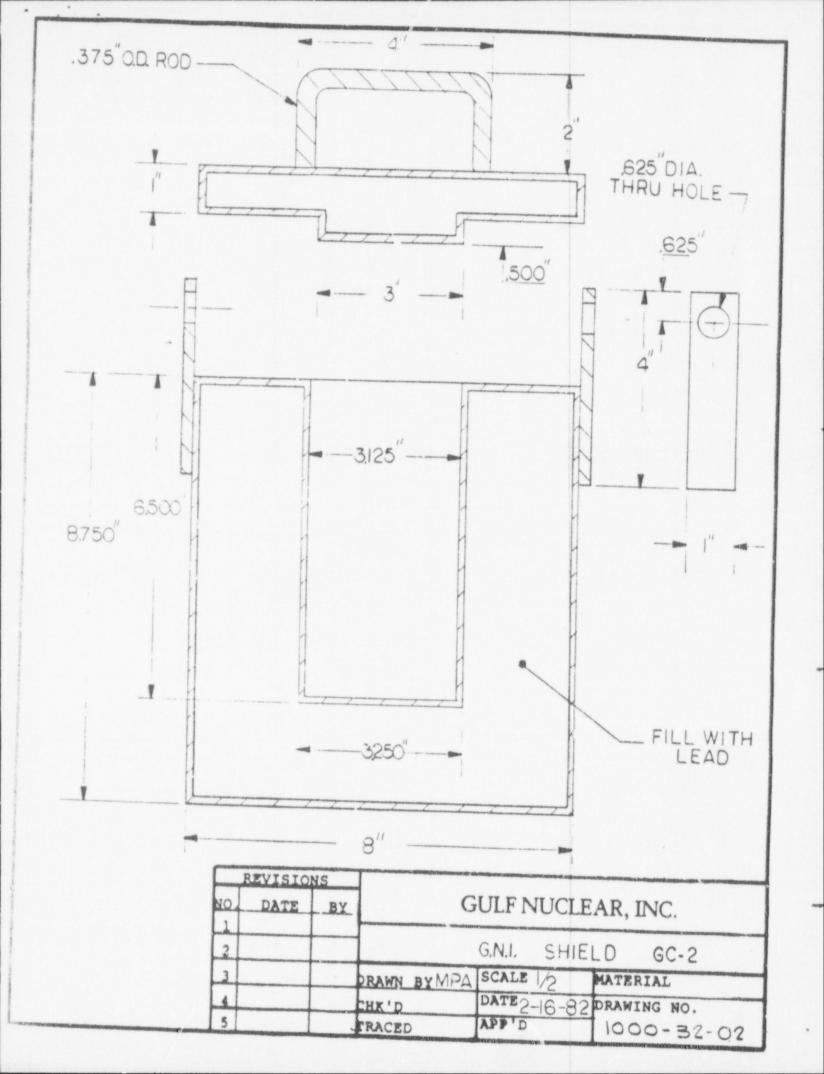
5-1233

Dated

Mike Bevill

Sales Representative

5-11 b.



GNI INCORPORATE 202 MEDICAL CENTER BLVD. P.O. BOX 796 WEBSTER, TEXAS 7236



Wireline Products Division 7450 Winscott Road • Fort Worth, Texas 76126 • Telephone (817) 249-1391 • Telex 293224

RADIOACTIVE MATERIAL TRANSFER TRANSFERRED TO A. B. Still Well Service, Inc. P. O. Box 102, Drumright, Oklahoma 74030 ADDRESS QUANTITY 5 Ci AmBe MATERIAL SERIAL NUMBER T-950 LICENSE NUMBER 35-19935-01 EXPIRATION DATE April 30, 1987 MODEL NO. AUTHORIZED AN-HP . MODEL NO. SHIPPED AN-HP LEAK TEST EXPIRATION DATE December 17, 1983 ENCLOSED X YES NO I hereby certify the above information has been completed and the licensee is authorized to receive the above material. November 10, 1983 Date SHIPPING INSPECTION RECORD DATE GROUP NUMBER ORDER NUMBER CARRIER RADIATION AT PACKAGE SURFACE TRANSP. INDEX READING (MR/HR At 1 YARD) Inspected By RECEIPT OF TRANSFERRED MATERIAL DATE RECEIVED BY TITLE



GULF NUCLEAR, INC.

100 NASA ROAD ONE SUITE 411 WEBSTER, TEXAS 77598 (713) 332-3581

CERTIFICATE OF LEAK TEST (LTK-1)

CUSTOMER

SIE/Geosource Route 5, Box 214 Fort Worth, Texas 76126

This is to certify that the leak test on the indicated source has been counted on the specified date and the results shown accurately represent the level of removable contamination.

SERIAL NO. OF SOURCE

T-950

ISOTOPE AmBe

QUANTITY 5 Ci.

REMARKS

MANUFACTURER

DATE OF TEST

6/17/83

RESULTS

GROSS COUNTS
BACKGROUND COUNTS
EFFICIENCY 26.4% DPM 0.

REMOVABLE CONTAMINATION

Less than 1×10^{-4} Microcuries.

 $(NOTE: Removable\ contamination\ equal\ to\ or\ greater\ than\ 5.0E-3\ microcuries\ (11,000\ dpm)\ constitutes\ a\ leaking\ source.)$

COUNTED BY CG DATE 7/15/83 APPROVED BY Frank malek gr.
TITLE Radiation Protection Officer



Wireline Products

7450 Winscott Rd. Fort Worth, Texas 76126

817 249-1391

Texas Wats 800 772-2305 U.S. Wats 800 433-2196 Telex 293224

CERTIFICATE

DOT TYPE "A" PACKAGE DESIGN

CONTAINER:

SIE, AmBe Source Shield

Part No. 769196-000

DESCRIPTION:

Steel Sphere

Diameter 14"

Height 17"

Weight 130#

Outer body and inner liner made of steel.

Cavity filled with Ashland Chemical Company, Aporol WEP 661-P extended with 50% water.

USE:

AmBe "Special Form" Radioactive Material Shipping and Storage Shield. Maximum activity 5 Curies.

REQUIREMENT:

Container must be labeled and marked in accordance with Department of Transportation and Nuclear Regulatory Agencies having regulatory authority.

This is to certify that the above container design has been evaluated and tested in accordance with the requirements set forth in CFR 49, Parts 173.411 and 173.412 and meets the Department of Transportation requirements for Type A containers.

Date: March 1, 1985

Radiation Safety Officer