



PHONE 234-2433

BOX 535
6 MAY 1986

CASPER, WYOMING 82602

D. BLAIR SPITZBERG
HEALTH PHYSICIST
U.S. NUCLEAR REGULATORY COMMISSION-REGION IV
811 RYAN PLAZA DR.; SUITE 1000
ARLINGTON, TX 76011

RE: PETRO-LOG, INC. INSPECTION DURING APRIL 1986

DEAR MR. SPITZBERG:

ATTACHED IS A COPY OF SOURCE CERTIFICATION CERTIFICATE ON AM-241/BE SERIAL
NO. 684 MODEL MRC.

ALSO ATTACHED IS AMERSHAM CORPORATION CERTIFICATE OF APPROVAL ON 7A CONTAINER
TEST.

I BELIEVE THESE ARE THE LAST TWO CERTIFICATES NEEDED FOR COMPLIANCE WITH N.R.C.
REGULATIONS.

WOULD YOU PLEASE ADVISE IF ADDITIONAL INFORMATION IS NEEDED.

SINCERELY

T.W. MORTON
VICE-PRESIDENT

8607070327 860702
REG4 LIC30
49-12992-01 PDR

AMERSHAM CORPORATION
2636 S. Clearbrook Dr.
Arlington Heights, IL 60005
812/593-6300 or 800/323-6665

In Canada
505 Inquois Shore Rd.
Oakville, ONT L6H 2R3
416/842-2720 or 800/268-5081

Certificate of approval for the transport of radioactive materials

This package complies with the Regulations for the Safe Transport of Radioactive Materials, safety Series No. 6 (IAEA Vienna 1973) and with the regulations outlined in 49 CFR part 173.

Design no. ACA-13

Package no. 3227B

Identification

Assembly

Design no.

3227B

Drawing no.

Description

Outer Shell - Stainless Steel

Outer packaging

Intermediate packaging

Inner packaging

WEP encasing a stainless steel sleeve

IAEA special form stainless steel capsule

Description

Colloquial name OWL Keg

Construction WEP filled Stainless Steel Drum

Overall dimensions 1.41 ft dia. x 1.71 ft high

Shield material and thickness WEP 6.6 in.

Cavity size 6.85 in. long x 3 in. dia.

Weight 165 lbs.

Conditions of approval

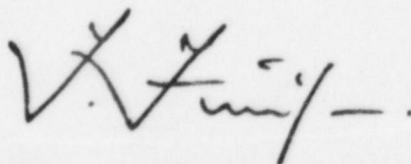
Type of approval US DOT 7A Type A

Permitted contents ^{241}Am Americium/Beryllium total contents 19.99 Ci

Maintenance

Other requirements Outside of package to be marked "USA DOT 7A Type A" and "Radioactive Material".

Approved



Radiation Safety Officer

Date 2 December 1982

Amersham



GULF NUCLEAR, INC.

202 MEDICAL CENTER BLVD. WEBSTER, TEXAS 77598 (713) 332-3581

SOURCE CERTIFICATION CERTIFICATE

CUSTOMER Petro-Log, Inc.
Box 887
Evanston, Wy. 82930

ISOTOPE Am-241/Be

SERIAL NUMBER 684

ACTIVITY 3 Ci.

MODEL MRC

ANSI CLASSIFICATION 77C56522

This is to certify that this source meets the requirements for special form as defined in U.S. Department of Transportation Title 49, Part 173.403 (z).

☒ This is to certify that this source meets the requirements of the Texas Regulations for the Control of Radiation Part 36.108.

YES (1) The source is doubly encapsulated.

YES (2) The radioactive material is insoluble and nondispersable as practical.

YES (3) The source is pressure tested to 25,000 psi (Absolute).

TEST PERFORMED BY RLS

APPROVED BY C. P. Hyslop

DATE April 17, 1986

TITLE RADIATION PROTECTION OFFICER

GULF NUCLEAR, INC.

GNG-5 CYLINDER CONTAINER

I. DESCRIPTION

GNG-5 cylinder container 14" O.D. x 14" long, 11 gage hot rolled mild steel. The front and back are 14" O.D., 11 gage HRMS welded on. The inner chamber is 3-1/2 O.D. x 9" long, 11 gage cylinder. The handle is 4-1/2" long and 1" O.D. tube 5" of 1" x 4" flat bar. The container also has a 5" x 4" x 1/4" plate. The container contains 50 lbs. Boric acid powder mixed with 3 gallons polyester resin and 1 oz. hardner. The insert is 3.0" I.D. x 11.25" long which bolts on the outside front and goes into the container.

II. LABELING

D.O.T. 7A radioactive material; proper T.I. sticker, serial number tag.

III. USES

To ship radioactive material special form.

IV. TEST PROCEDURES

4.1. Water Spray Test: simulated exposure to rainfall of approximately 2 inches 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 Compression Test: The test lasted for 24 hours and consisted of a compressive load equivalent to 225 lbs/ft.² multiplied by the vertically projected areas of the package. The load was applied to two opposite sides of the package, one of which the package normally stands.

4.3.1. Visual Inspection: showed no apparent damage.

4.4. 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'.

4.4.1. Visual Inspection: showed no apparent damage.

WITNESSED:

Kent Vaughan
Kent Vaughn
Radiography Supervisor

5-12-83
Dated

Mike Bevil
Mike Bevill
Sales Representative

5-11-83
Dated