

DEC 24 1990

In Reply Refer To:  
License: 49-21384-01  
Docket: 030-20586/90-01

Frontier Production Logging, Inc.  
ATTN: Bram Lasseter  
Radiation Safety Officer  
P.O. Box 2778  
Cody, Wyoming 82414

Gentlemen:

Thank you for your letter of October 30, 1990, in response to our letter and attached Notice of Violation (NOV) both dated September 11, 1990. We have reviewed your reply and find it responsive to the concerns raised in our Notice of Violation for Violations 1 through 3.a.

However, in your response to Violation 3.b, you addressed transportation package shipping labels, but the violation was for not having the required information on your shipping papers. Please address the shipping paper violation in your response to this letter.

Your response of October 30, 1990, was not in the format requested in the last paragraph of the Notice of Violation sent to you on September 11, 1990. You were specifically requested to reply to (1) the reason for the violation if admitted, (2) the corrective steps which have been taken and the results achieved, (3) the corrective steps which will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Please respond to Violation 3.b by answering these questions in the order as given above.

The enclosed copy of your shipping paper form sent to us with your letter of October 30, 1990, needs to contain the additional information of Frontier's name, street address, and telephone number.

Please respond to this letter within 10 days of the date of this letter.

Should you have any questions concerning this letter, we will be pleased to discuss them with you.

Sincerely,

*L.A. Vandell for*

A. Bill Beach, Director  
Division of Radiation Safety  
and Safeguards

cc:  
Wyoming Radiation Control Program Director

bcc: (see next page)

RIV:NMS  
WLHolley/ch  
12/13/90

C:NMSIS  
CLCain  
12/13/90

D:DRSS  
ABBeach  
12/21/90

9101020404 901224  
REG4 LIC30  
49-21384-01 PDR

IF-07

020006

bcc w/copy of licens<sup>r</sup> letter:  
DMB - Original (IE-b.)  
ASBeach  
MRodriguez, OC/LFDCB (MS 4503)  
WLFisher  
NMSIS  
RIV Files (2)

RDMartin  
LAYandell  
CLCain  
WLHolley  
MIS System  
RSTS Operator



October 30, 1990

U.S. Nuclear Regulatory Comm.  
Region IV  
611 Ryan Plaza Dr., Suite 1000  
Arlington, TX 76011

ATTN: Mr. Holley

RE: Lic. #49-21384-01  
Docket: #30-20586/90-01

Dear Mr. Holley,

In response to your inspection at Frontier Production Logging, regarding our non-compliance of certain activities, we feel we have taken corrective actions that will ensure our compliance with all of NRC's Federal Regulations.

Item #1 of our violations requires a Semi-Annual Visual Inspection. I did not realize that it should have been in writing. We now have a form enclosed, (RA Form #7), that we implemented on Oct. 1, 1990 which we feel should fulfill our requirements from here on and will be kept on record.

Item #2 required records of incoming package surveys. Records have been kept since the inspection and will from here on. A sample is enclosed on the packing slip with each shipment. Safe opening procedures for packages containing Radioactive Material will be observed-here at Frontier Production Logging in accordance to NRC.

Item #3a was in regards to non-compliance of ammunition cans used as shipping packages. Frontier Production Logging now uses, since the inspection, a package that complies to DOT 7A Certification. RA will not be transported in anything other than this packaging from here on.

~~4011200075~~

7/0

IC90-321

IED7

Item #3b requires a shipping description of a hazardous/Radioactive material. Frontier Production Logging has purchased appropriate stickers for proper labeling of any transported packages which now contain the "UN" identification number, the category of label, and the transport index for shipments. Samples are enclosed.

We appreciate your help and explanations so that we at Frontier Production Logging can stay in compliance with NRC's and DOT's requirements, now and in the future.

Thank you  
Sincerely,



Bram Lasseter  
President

BL/sw

Encl: 4

RA FORM #7

Semi-Annual Visual Inspection

Excellent

Good

Poor  
Needs Attention

Lifting Tools \_\_\_\_\_

Injection Tools \_\_\_\_\_

RA Compartment \_\_\_\_\_

Transport Containers \_\_\_\_\_

Handling Tools \_\_\_\_\_

Rubber Gloves \_\_\_\_\_

Survey Meter \_\_\_\_\_

Placards \_\_\_\_\_

Labels \_\_\_\_\_

Storage Containers \_\_\_\_\_

RA Material \_\_\_\_\_

Inspected By: \_\_\_\_\_

Date: \_\_\_\_\_



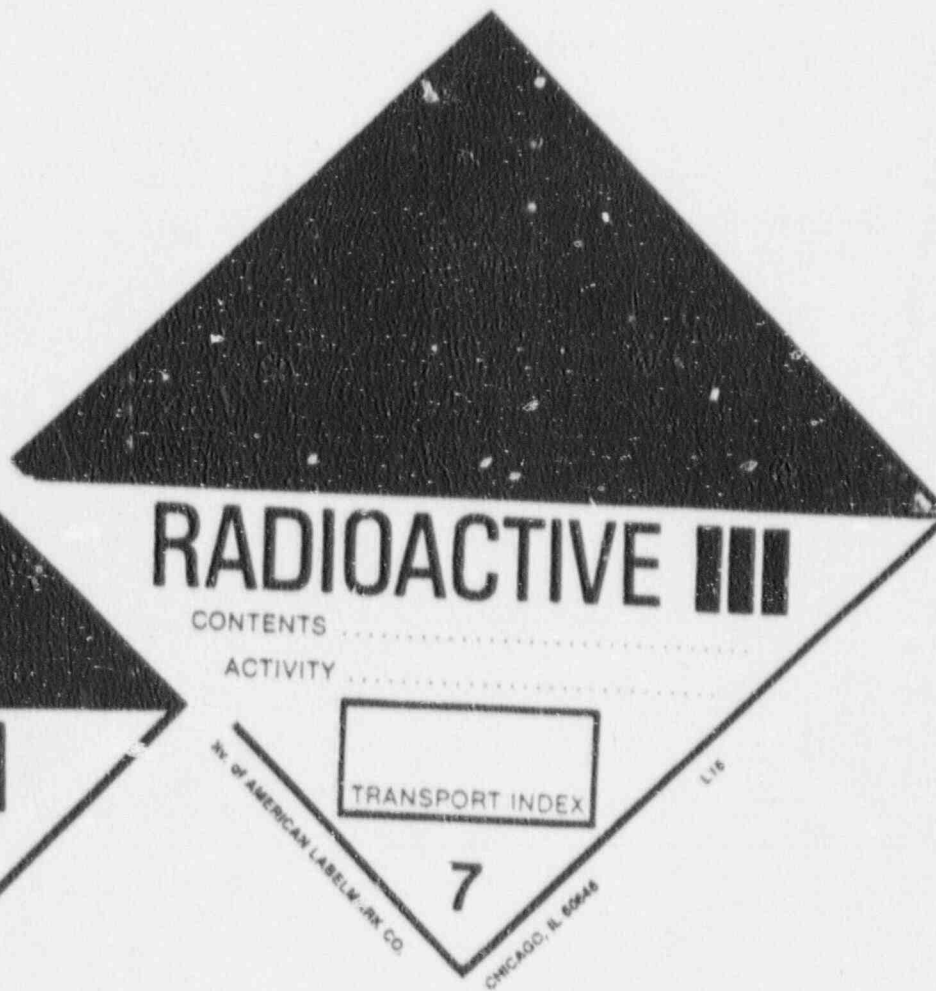
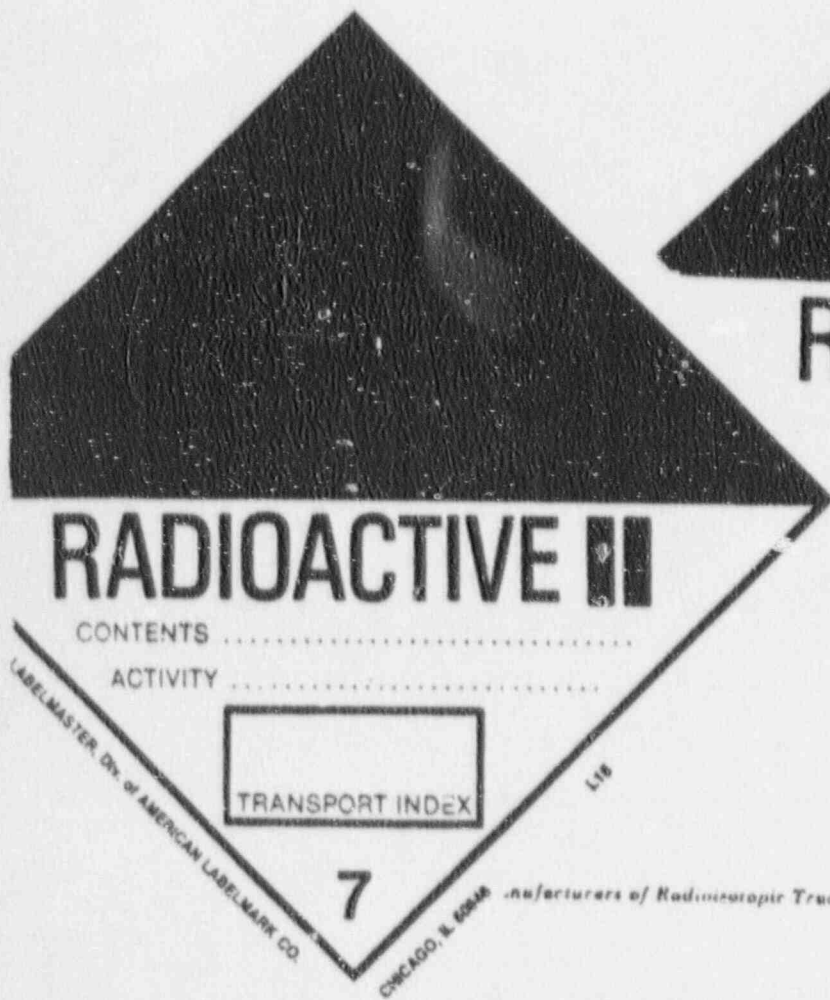


Post Office Box 13327  
Odessa, Texas 79768  
915/563-4127

DOT 7A CERTIFICATION

12 x 12 x 12 corrugated box (curtain coated).

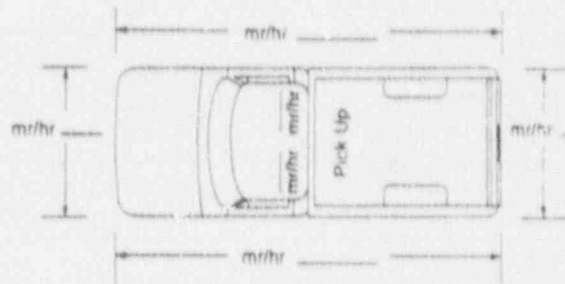
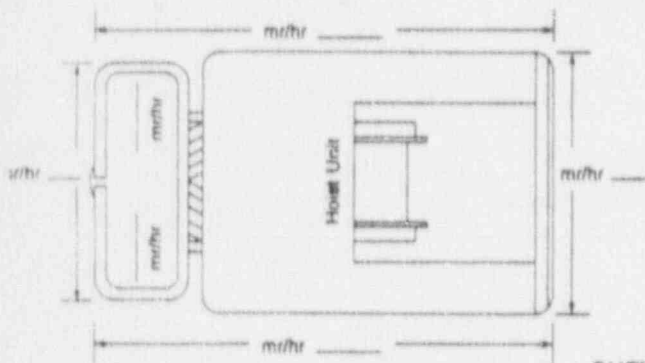
This container has been tested in accordance with specifications outlined in 49CFR 173.461 Parts (A)1,3 & 4, part 173.463, 173.412 parts (M)1 & 2, 173.465 parts (A), (C)1 & 6, (D)1, (E)1 & 2, 173.466 (A)1 & 2. These tests meet or exceed USA DOT 7A standards. This container design is for the transportation of low level radioactive materials only. All containers must comply with radiation limits prescribed in 49 CFR.



DEPARTING LOCATION		VEHICLE UNIT NUMBER			SERVICE ORDER NUMBER			
DESCRIPTION OF CONTENTS						PACKAGE		
PROPER SHIPPING NAME		IDENTIFICATION NUMBER	RADIONUCLIDE	FORM	ACTIVITY	CATEGORY	TRANSPORT INDEX	TYPE
REFERENCE TITLE 49	CFR PART 172	TABLE 172.101	NAME OR SYMBOL OF PRINCIPAL RADIOACTIVE CONTENT	CHEMICAL AND/OR PHYSICAL STATE (GAS/ LIQUID/SOLID/ SPECIAL FORM)	NUMBER OF CURIES, MILLCURIES, OR MICROCURIES	I-WHITE OR II-YELLOW OR III-YELLOW LABEL	FOR YELLOW LABEL CATEGORIES ONLY	TYPE A OR TYPE B
RADIOACTIVE MATERIAL		UN-						
RADIOACTIVE MATERIAL		UN-						
RADIOACTIVE MATERIAL		UN-						
RADIOACTIVE MATERIAL		UN-						
RADIOACTIVE MATERIAL		UN-						
RADIOACTIVE MATERIAL		UN-						

VEHICLE RADIATION SURVEY

1. Indicate each source location with an "X".
2. Measure and record radiation level at front, rear, both sides and all occupied positions.
3. Keep this paper on this vehicle during the transportation of radioactive materials.



SURVEY METER INFORMATION

MANUFACTURER \_\_\_\_\_ SERIAL NUMBER \_\_\_\_\_

MODEL \_\_\_\_\_ DATE OF LAST CALIBRATION \_\_\_\_\_

This is to testify that the above named materials are properly classified, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

RADIOLOGICAL SUPERVISOR



ATLAS WIRELINE SERVICES SOURCE TYPE	PROPER SHIPPING NAME	I.D. NUMBER	RADIO-NUCLIDE	FORM	ACTIVITY	CATEGORY OF LABEL	RANGE OF TRANSPORT INDEX	TYPE
S17S20	Radioactive Material, Special Form, N.O.S.	UN-2974	Am-241	Special Form	18 Ci	Yellow III	70 - 80 Ti = 2.8 x gamma	A
S17R5	Radioactive Material, Special Form, N.O.S.	UN-2974	Am-241	Special Form	4.5 Ci	Yellow III	45 - 55 Ti = 12 x gamma	A
S17C04 or S17B04	Radioactive Material, Special Form, N.O.S.	UN-2974	Am-241	Special Form	400 mCi	Yellow III	15 - 25 Ti = 5.6 x gamma	A
S17L075	Radioactive Material, Special Form, N.O.S.	UN-2974	Am-241	Special Form	75 mCi	Note 1	Note 2 Ti = 35 x gamma	A
S17L150	Radioactive Material, Special Form, N.O.S.	UN-2974	Am-241	Special Form	150 mCi	Note 1	Note 2 Ti = 35 x gamma	A
S3T20 or S3E20	Radioactive Material, Special Form, N.O.S.	UN-2974	Cs-137	Special Form	2 Ci	Yellow III	15 - 25	A
S3T30	Radioactive Material, Special Form, N.O.S.	UN-2974	Cs-137	Special Form	3 Ci	Yellow III	25 - 35	A
S3W025	Radioactive Material, Special Form, N.O.S.	UN-2974	Cs-137	Special Form	25 mCi	Yellow II	0.2 - 0.3	A
S3M001	Radioactive Material, Special Form, N.O.S.	UN-2974	Cs-137	Special Form	100 mCi	Yellow II	0.2 - 0.3	A
S2K	Radioactive Material, N.O.S.	UN-2982	Ra-226	Solid	2.5 µCi	Note 3	Note 2	A
S17A1	Radioactive Material, N.O.S.	UN-2982	Am-241	Solid	0.5 mCi	Note 1	Note 2	A
S3J	Radioactive Material, N.O.S.	UN-2982	Cs-137	Solid	10 µCi	Note 1	Note 2	A
TH-228	Radioactive Material, N.O.S.	UN-2982	Th-228	Solid	10 µCi	Note 1	Note 2	A
Tracer Material	Radioactive Material, N.O.S.	UN-2982	I-131 Co-60 Ir-192	Liquid or Solid	Note 4	Note 1	Note 2	A
2750 or 4703	Radioactive Material, Limited Quantity, N.O.S.	UN-2910	H-3	Special Form	20 Ci	None Note 5	N/A	N/A
4701	Radioactive Material, Limited Quantity, N.O.S.	UN-2910	H-3	Special Form	10 Ci	None Note 5	N/A	N/A
Spectralon Calibrator	Radioactive Material, Limited Quantity, N.O.S.	UN-2910	K-40 U-238 and Th-232	Solid	Less than 50 µCi	None Note 5	N/A	N/A
1945	Radioactive Material, Articles Manufactured from Natural or Depleted Uranium or Natural Thorium	UN-2909	Depleted Uranium	Solid	Less than 0.711% by weight U-235	None Note 6	N/A N/A	N/A N/A
Empty Container	Radioactive Material, Empty Package	UN-2908	N/A	N/A	N/A	Empty	N/A	N/A

**NOTE 1:** Labels required will depend on radiation at surface of package and transport index.

**NOTE 2:** Transport index will depend on packaging.

**NOTE 3:** Requires Yellow II when transported in the aluminum frame (Ti = 0.1 - 0.2). When shipped dis-assembled, see Notes 1 & 2.

**NOTE 4:** Actual activity of material transported.

**NOTE 5:** Notice in the package must include Atlas Wireline Services, Houston, TX and the statement "This package conforms to the conditions and limitations specified in 49 CFR 173.421 for excepted radioactive materials, limited quantity, N.O.S., UN-2910."

**NOTE 6:** Notice in the package must include "Atlas Wireline Services, Houston, TX" and the statement "This package conforms to the conditions and limitations specified in 49 CFR 173.424 for excepted radioactive materials, articles manufactured from natural or depleted uranium or natural thorium, UN-2909."

**WHITE I:** Does not exceed 0.5 mrem at any point on the surface of the package.

**YELLOW II:** More than 0.5 mrem but no more than 50 mrem on the surface of the package and Ti does not exceed 1.

**YELLOW III:** More than 50 mrem on the surface of the package or Ti exceeds 1.

**Transport Index (TI):** Radiation level in mrem 1 meter from highest radiation area on the surface of the package.

ATLAS WIRELINE SERVICES SOURCE TYPE	PROPER SHIPPING NAME	I.D. NUMBER	RADIO-NUCLIDE	FORM	ACTIVITY	CATEGORY OF LABEL	RANGE OF TRANSPORT INDEX	TYPE
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S3T20 or S3E20	Radioactive Material, Special Form, N.O.S.	UN-2974	Cs-137	Special Form	2 Ci	Yellow III	1.5 - 2.5	A
S3T30	Radioactive Material, Special Form, N.O.S.	UN-2974	Cs-137	Special Form	3 Ci	Yellow III	2.5 - 3.5	A
S3W025	Radioactive Material, Special Form, N.O.S.	UN-2974	Cs-137	Special Form	25 mCi	Yellow II	0.2 - 0.3	A
S3M001	Radioactive Material, Special Form, N.O.S.	UN-2974	Cs-137	Special Form	100 mCi	Yellow II	0.2 - 0.3	A
S2K	Radioactive Material, N.O.S.	UN-2982	Ra-226	Solid	2.5 µCi	Note 3	Note 2	A
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TH-228	Radioactive Material, N.O.S.	UN-2982	Th-228	Solid	10 µCi	Note 1	Note 2	A
Tracer Material	Radioactive Material, N.O.S.	UN-2982	I-131 Co-60 Ir-192	Liquid or Solid	Note 4	Note 1	Note 2	A
2750 or 4703	Radioactive Material, Limited Quantity, N.O.S.	UN-2910	H-3	Special Form	20 Ci	None Note 5	N/A	N/A
4701	Radioactive Material, Limited Quantity, N.O.S.	UN-2910	H-3	Special Form	10 Ci	None Note 5	N/A	N/A
Spectrolog Calibrator	Radioactive Material, Limited Quantity, N.O.S.	UN-2910	K-40 U-238 and Th-232	Solid	Less than 50 µCi	None Note 5	N/A	N/A
1945	Radioactive Material, Articles Manufactured from Natural or Depleted Uranium or Natural Thorium	UN-2909	Depleted Uranium	Solid	Less than 0.711% by weight U-235	None Note 6	N/A N/A	N/A N/A
Empty Container	Radioactive Material, Empty Package	UN-2908	N/A	N/A	N/A	Empty	N/A	N/A

**NOTE 1:** Labels required will depend on radiation at surface of package and transport index.

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**YELLOW III:** More than 50 mrem on the surface of the package or TI exceeds 1.

**Transport Index (TI):** Radiation level in mrem 1 meter from highest radiation area on the surface of the