

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 39, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee

1. Frontier Production Logging, Inc.

2. P.O. Box 2778
Cody, Wyoming 82414In accordance with letter dated
March 21, 19973. License number 49-21384-01 is amended in
its entirety to read as follows:

4. Expiration date June 30, 1994

5. Docket or
Reference No 030-205866. Byproduct, source, and/or
special nuclear material7. Chemical and/or physical
form8. Maximum amount that licensee
may possess at any one time
under this license

A. Americium-241

A. Sealed sources
(Amersham/Gulf
Nuclear Model (GN)
Model NEEI-AmBe-71-1)A. Not to exceed 4.6
curies per source

B. Americium-241

B. Sealed sources
(Amersham Corporation
Model AMC.CYN Series)B. Not to exceed 5
curies per source
Total possession of
Americium-241 in
Items 6.A and 6.B
shall not exceed 100
curies

C. Cesium-137

C. Sealed sources (GN
Model CSV)C. Not to exceed 10
curies per source

D. Iodine-131

D. Liquid

D. Not to exceed 200
millicuries total,
not to exceed 50
millicuries per
injection

E. Iridium-192

E. Labelled frac sand

E. Not to exceed 200
millicuries total,
not to exceed 50
millicuries per
injection

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

49-21384-01

Docket or Reference Number

030-20586

Amendment No. 04

9. Authorized use:

- A. through C. For use in oil and gas well logging.
- D. through E. For use in tracer studies in oil well and gas well logging.

CONDITIONS

10. Licensed material may be used at the licensee's facility located at Blackburn Industrial Park, Blackburn Avenue, Cody, Wyoming, 2121 E. Sheridan, Cody, Wyoming, and at temporary job sites of the licensee anywhere in the United States where the U.S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
11. The licensee shall not vacate or release to unrestricted use a field office or storage location whose address is identified in Condition 10, without prior NRC approval.
12. A. Licensed material shall be used by, or under the supervision and in the physical presence of, W. Bram Lasseter or individuals who have been trained as specified in application dated August 30, 1988, and letters dated April 24 and June 14, 1989.
- B. The Radiation Safety Officer for this license is W. Bram Lasseter.
13. Notwithstanding the periodic leak test required by 10 CFR 39.35, the requirement does not apply to sources, except sources containing plutonium, that are stored and not being used. The sources exempted from this periodic test shall be tested for leakage before use or transfer to another person. No sealed source shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
14. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d) for establishing decommissioning financial assurance.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number

49-21384-01

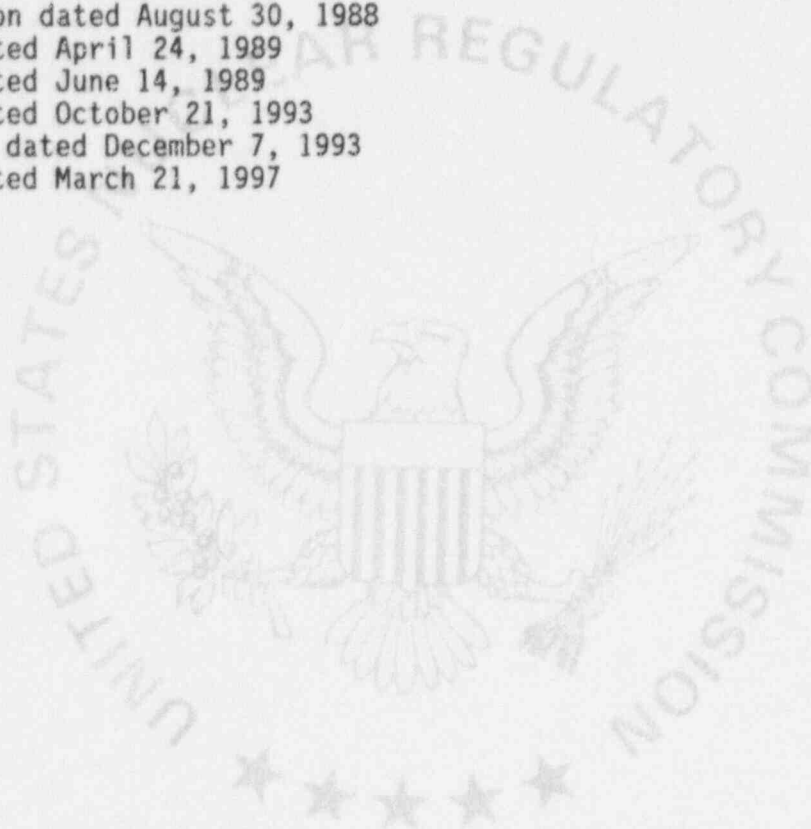
Docket or Reference Number

030-20586

Amendment No. 04

15. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

- A. Application dated August 30, 1988
- B. Letter dated April 24, 1989
- C. Letter dated June 14, 1989
- D. Letter dated October 21, 1993
- E. Facsimile dated December 7, 1993
- F. Letter dated March 21, 1997



FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date APR 17 1997

Original Signed By

Vivian H. Campbell

By

Nuclear Materials Licensing Section
Region IV
Arlington, Texas 76011



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

April 17, 1997

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

SUBJECT: LICENSE AMENDMENT

Please find enclosed License No. 49-21384-01. You should review this license carefully and be sure that you understand all conditions. If you have any questions, you may contact the reviewer who signed your license at 817-860-8143.

NRC expects licensees to conduct their programs with meticulous attention to detail and a high standard of compliance. Because of the serious consequences to employees and the public which can result from failure to comply with NRC requirements, you must conduct your program involving radioactive materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

1. Operate in accordance with NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers: Inspection and Investigations," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Possess radioactive material only in the quantity and form indicated in your license.
3. Use radioactive material only for the purpose(s) indicated in your license.
4. Notify NRC in writing of any change in mailing address (no fee required if the location of radioactive material remains the same).
5. Request and obtain written NRC consent before transferring your license or any right thereunder, either voluntarily or involuntarily, directly or indirectly, through transfer of control of your license to any person or entity. A transfer of control of your license includes not only a total change of ownership, but also a change in the controlling interest in your company whether it is a corporation, partnership, or other entity. In addition, appropriate license amendments must be requested and obtained for any other planned changes in your facility or program that are contrary to your license or contrary to representations made in your license application, as well as supplemental correspondence thereto, which are incorporated into your license. A license fee may be charged for the amendments if you are not in a fee-exempt category.

6. Maintain in a single document decommissioning records that have been certified for completeness and accuracy listing all the following items applicable to the license:
 - Onsite areas designated or formerly designated as restricted areas as defined in 10 CFR 20.3(a)(14) or 20.1003.
 - Onsite areas, other than restricted areas, where radioactive materials in quantities greater than amounts listed in Appendix C to 10 CFR 20.1001-20.2401 have been used, possessed, or stored.
 - Onsite areas, other than restricted areas, where spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site have occurred that required reporting pursuant to 10 CFR 30.50(b)(1) or (b)(4), including areas where subsequent cleanup procedures have removed the contamination.
 - Specific locations and radionuclide contents of previous and current burial areas within the site, excluding radioactive material with half-lives of 10 days or less, depleted uranium used only for shielding or as penetrators in unused munitions, or sealed sources authorized for use at temporary job sites.
 - Location and description of all contaminated equipment involved in licensed operations that is to remain onsite after license termination.
7. Submit a complete renewal application with proper fee, or termination request at least 30 days before the expiration date on your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of radioactive material after your license expires is a violation of NRC regulations.
8. Request termination of your license if you plan to permanently discontinue activities involving radioactive material.

You will be periodically inspected by NRC. Failure to conduct your program in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in enforcement action against you. This could include issuance of a notice of violation; imposition of a civil penalty; or an order suspending, modifying, or revoking your license as specified in the "General Statement of Policy and Procedure for NRC Enforcement Actions" (Enforcement Policy), 60 FR 34381, June 30, 1995.

Frontier Production Logging, Inc.

-3-

Thank you for your cooperation.

Sincerely,

Original Signed By
Vivian H. Campbell

Vivian H. Campbell
Senior Radiation Specialist
Nuclear Materials Licensing Branch

Docket: 030-20586
License: 49-21384-01
Control: 466342

Enclosures: As stated

APR 17 1997

Frontier Production Logging, Inc.

-4-

DOCUMENT NAME: P:\

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

RIV:NMLB	N	RIV:					
VHCampbell							
4/17/97							

OFFICIAL RECORD COPY

From: Vivian Campbell
To: TWD2.TWP9.REM1
Date: 3/25/97 3:22pm
Subject: Frontier Production Logging, Inc.

Rita,

Frontier is a well logging licensee. Condition 10 of his licensee authorizes temporary job sites as well as storage at a specific address. His storage facility is actually his trucks. The specific address identified on his license is nothing more than the location that he parks his trucks on a routine basis. His mailing address (on the license) is a post office box. Now he needs to park his trucks at another address. There will be no technical review of the storage facility as that was approved in the renewal of the license. We simply need to identify a specific address that we know the licensee, or his trucks, can be located. Since there will be no technical review and this is very similar to a change in mailing address, is a fee required?

THX, Viv

CC: JDB, DBS, LLH

FILE COPY



Mail Envelope Info: (3338420D.8AA : 23 : 35500)

Subject: Frontier Production Logging, Inc.
Creation Date: 3/25/97 3:22pm
From: Vivian Campbell

Created By: ARD1.ARP1:VHC

Recipients	Action	Date & Time
Post Office ARD1.ARP1	Delivered	03/25/97 03:22pm
DBS CC (David Spitzberg)		
JDB CC (Jacqueline Burks)		
LLH CC (Linda Howell)	Opened	03/25/97 03:23pm
Post Office TWD2.TWP9	Delivered	03/25/97 03:20pm
REM1 (Rita Messier)	Opened	03/25/97 03:21pm
Domain.Post Office	Delivered	Route
ARD1.ARP1	03/25/97 03:22pm	ARD1.ARP1
TWD2.TWP9	03/25/97 03:20pm	TWD2.TWP9

Files	Size	Date & Time
MESSAGE	782	03/25/97 03:22pm
View	3422	03/25/97 09:22am

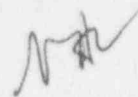
Options

Auto Delete:	No
Expiration Date:	None
Notify Recipients:	Yes
Priority:	Normal
Reply Requested:	No
Return Notification::	None

Concealed Subject:	No
Security:	Normal

To Be Delivered:	Immediate
Status Tracking:	Delivered & Opened

FILE COPY



49-21384-01

From: Vivian Campbell
To: TWD2.TWP9.REM1
Date: 3/25/97 4:22pm
Subject: Frontier Production Logging, Inc.

3/26/97

Rita,

Frontier is a well logging licensee. Condition 10 of his licensee authorizes temporary job sites as well as storage at a specific address. His storage facility is actually his trucks. The specific address identified on his license is nothing more than the location that he parks his trucks on a routine basis. His mailing address (on the license) is a post office box. Now he needs to park his trucks at another address. There will be no technical review of the storage facility as that was approved in the renewal of the license. We simply need to identify a specific address that we know the licensee, or his trucks, can be located. Since there will be no technical review and this is very similar to a change in mailing address, is a fee required?

THX, Viv

CC: JDB, DBS, LLH

Jim, what is your feeling on this?
Rita has requested the fee - she
would have to call them if
the fee should not be due.
Thanks, Sandy

Sandy, - If no technical review required,
then no fee is due. Ms Campbell says
technical review of truck done on
renewal of license
for stalling.

LICENSE FEE REQUIREMENTS

LICENSE FEE AND DEBT COLLECTION BRANCH
DIVISION OF ACCOUNTING AND FINANCE
OFFICE OF THE CONTROLLER
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001FRONTIER PRODUCTION LOGGING, INC.
ATTN: Wm. BRAM LASSETER
PRISIDENT - RSO
P.O. BOX 2778
CODY, WY 82414*I left a message with Sheri for Bram Lassester, stating to disregard 3/24/97 fee request. A fee is not required*

TYPE OF ACTION

- ☐ NEW LICENSE
☐ RENEWAL OF LICENSE
☒ AMENDMENT TO LICENSE

REQUESTED DATE

3-21-97

LICENSE NUMBER

49-21384-01

CONTROL NUMBER

466342 ATTN: RITA MESSIER, LFARB, T9E10

I. APPLICATION FEE DUE

Your request for a licensing action is subject to the fee(s) in the category(ies) noted below in accordance with Section 170.31 of the enclosed Federal Register notice. Payment of the fee is required prior to the issuance of the license, renewal, or amendment.

FEE CATEGORY	APPLICATION	RENEWAL	AMENDMENT
5A	\$	\$	\$ 640.00
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$
	\$	\$	\$

FEE(s) DUE	\$	640.00
PAYMENT RECEIVED	\$	
AMOUNT DUE	\$	640.00

☒ Your request was received without the prescribed application fee.☐ We received your Check No. _____ in the amount of \$ _____. Payment of the additional fee noted above is required.☐ Your request will increase the scope of your license program. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(d)(2).☐ Your license expired prior to the receipt of your application for renewal. Therefore, your request is subject to the application fee(s) noted above. Refer to Section 170.31 and Footnote 1(a).

MAKE PAYMENT OF THE FEE(S) TO THE U.S. NUCLEAR REGULATORY COMMISSION AND MAIL THE PAYMENT TO THE ADDRESS LISTED AT THE TOP OF THIS FORM. IF WE DO NOT RECEIVE A REPLY FROM YOU WITHIN 30 CALENDAR DAYS FROM THE DATE LISTED BELOW, WE SHALL ASSUME THAT YOU DO NOT WISH TO PURSUE YOUR APPLICATION AND WILL VOID THIS ACTION.

SIGNATURE -- LICENSE FEE ANALYST

RITA MESSIER

LFDCB

REMessier

3/24/97

LFDCB

Rem

Distribution:

Pending Fee File

LFARB R/F (2)

OC/DAF RF

OC/DAF/SF (LE 3 2.7)

Region

DATE

3-24-97

(FOR LFMS USE)
INFORMATION FROM LTS

BETWEEN:

License Fee Management Branch, ARM
and
Regional Licensing Sections

Program Code: 03110
Status Code: 2
Fee Category: 5A
Exp. Date: 19940630
Fee Comments:
Decom Fin Assur Req'd: N

1997 MAR 24 PM 1:21

LICENSE FEE TRANSMITTAL

A. REGION IV

1. APPLICATION ATTACHED

Applicant/Licensee: FRONTIER PRODUCTION LOGGING, INC.
Received Date: 970321
Docket No: 3020586
Control No.: 466342
License No.: 49-21384-01
Action Type: Amendment

2. FEE ATTACHED

Amount:
Check No.: 4

3. COMMENTS

Signed
Date

Billie Pruszyński
3/21/97

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered / /)

1. Fee Category and Amount: 5A

FEE NOT REQUIRED

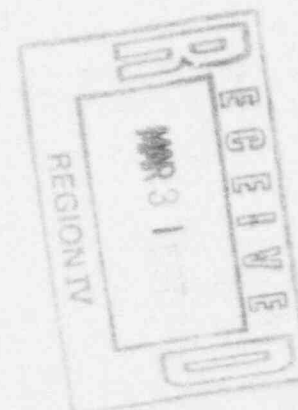
2. Correct Fee Paid. Application may be processed for:
Amendment ✓
Renewal
License

No Technical Review done

3. OTHER

Signed
Date

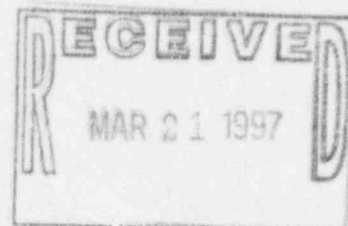
Rita Massier
3/26/97



Log	<u>Mar 3 IV</u>
Remitter	
Check No.	
Amount	
Fee Category	<u>5A</u>
Type of Fee	<u>Amd</u>
Date Check Rec'd.	
Date Completed	<u>3/26/97</u>
By	<u>Rita</u>



P.O. Box 2778 • Cody, Wyoming 82414 • (307) 587-5995



March 21, 1997

Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

RE: Materials Lic#49-21384-01
Reference # 030-20586

Linda Howell,

Per our phone conversation 3-20-97, following the NRC inspection by your field representative Jeff Cruz, Frontier Production Logging, Inc. would like to make a request for an amendment to condition number 10 of the NRC materials license referenced above.

Request approval of change of address for storage location referenced in item #10 from 2121 E. Sheridan Avenue to Blackburn Industrial Park on Blackburn Avenue, Cody, WY.

After vacating storage site at 2121 E. Sheridan Ave. on January 5, 1996, a Site Storage Monitor Survey was taken on that same date, the proper completed form is enclosed.

Your attention and consideration to this requested amendment will be greatly appreciated.

Sincerely,

Wm. Bram Lasseter
President-RSO

BL/sw

encl: Form RA-2

FAX#817-860-8263

466342

Form #5.

Site Storage Monitoring Survey
Form RA-2

All radioactive material storage facilities are to be monitored for radiation levels each month. This check should be made at the same time that inventory is made.

Type Survey Meter Used Victorson Date 1-5-96
Meter Serial No. 3792 Location 2121 E. 5th St. An. Ave.,
Date Calibrated 10-6-95 Dept. Cody, WY 82414
Well Logging

1. Background .01 mr/hr*
*Normal background is recorded at least 30 feet from the storage facility or 6 feet from the cover of the downhole storage.
2. Monitoring of storage should be taken on each side of the storage facility, with the highest reading recorded. Note: "Caution - Radiation Area", signs shall be posted where readings may exceed 5 mr/hr. "Caution - Radioactive Material", signs shall be posted at the entrance to storage facilities.

.01 mr/hr

Sign

Sign

Sign

Sign

.01 mr/hr

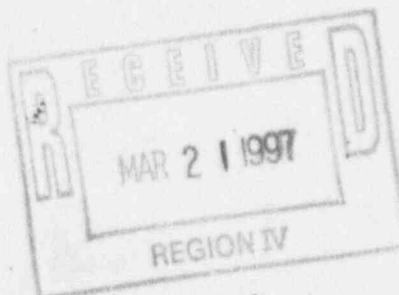
.01 mr/hr

.01 mr/hr

Building
Bunker
Underground
☒ Vehicle
Other*

Surveyed by: Wm. Brian Lantieri

Note: Please designate if storage is either building, bunker or underground by checking one of the above. If needed draw a diagram of your storage area/areas on the back of this form.



466342