

## ACCEPTANCE REVIEW MEMO (ARM)

Licensee: Schlumberger Technology Corp License No.: 42-00090-03

Docket No.: 030-06388

Mail Control No.: 471017

Type of Action: Amend

Date of Requested Action: 06-20-06

Reviewer  
Assigned:

ARM reviewer(s): Torres

RITC

Response	Deficiencies Noted During Acceptance Review
	1. [ ] Open ended possession limits. Submit inventory. Limit possession. [ ] Inform licensee that we are limiting possession limits. [ ] Ask the licensee if they have any type-amount of EPAct Material.
	2.
	3.

Reviewer's Initials: \_\_\_\_\_

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

- ☐ Yes ☐ No Request for unrestricted use for Group 2 or higher category should be transferred by memo to FCDB within 10 days of receipt.
- ☐ Yes ☐ No Decommissioning notification should be completed within 30 days.
- ☐ Yes ☐ No Termination request < 90 days from date of expiration
- ☐ Yes ☐ No Expedite (medical emergency, no RSO, location of use/storage not on license, RAM in possession not on license, other)
- ☒ Yes ☐ No TAR needed to complete action.

Branch Chief's and/or Sr. HP's Initials: \_\_\_\_\_

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

### SUNSI Screening according to RIS 2005-31

☐ Yes ☒ No Non-Publicly Available, Sensitive if any item below is checked

General guidance:

- ☒ RAM = or > than Category 3 (Table 1, RIS 2005-31), use Unity Rule
- ☒ Exact location of RAM (whether = or > than Category 3 or not)
- ☒ Design of structure and/or equipment (site specific)
- ☒ Information on nearby facilities
- ☒ Detailed design drawings and/or performance information
- ☒ Emergency planning and/or fire protection systems

Specific guidance for medical, industrial and academic (above Category 3):

- ☒ RAM quantities and inventory
- ☒ Manufacturer's name and model number of sealed sources & devices
- ☒ Site drawings with exact location of RAM, description of facility
- ☒ RAM security program information (locks, alarms, etc.)
- ☒ Emergency Plan specifics (routes to/from RAM, response to security events)
- ☒ Vulnerability/security assessment/accident-safety analysis/risk assess
- ☒ Mailing lists related to security response

Branch Chief's and/or Sr. HP's Initials: \_\_\_\_\_

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

2/12

# Schlumberger

**JUN 22 2006**

# DNMS

**RE: Amendment Request for License 42-00090-03**

I am writing to request an amendment to license 42-00090-03 issued to Schlumberger Technology Corporation. This license presently authorizes Schlumberger to perform well logging operations using radioactive materials in oil and gas wells. I request two changes:

- 1) That this authority be expanded to allow Schlumberger to perform well logging operations using any of the radioactive materials covered by the license in any well (not just oil and gas wells) in which the potable water aquifers are protected by casing; and
- 2) That this authority be expanded to allow Schlumberger to perform well logging operations using well logging instruments containing a tritium neutron generator target source ("neutron generator"), as defined in 10 CFR 39.55, and/or energy compensation sources ("ECS"), as defined in 10 CFR 39.53, in any well (not just oil and gas wells) in which the potable water aquifers are not protected by casing.

Presently License 42-00090-03, 9 - Authorized Use, allows radioactive material P, S through CC, EE, and II to be used in either oil and gas wells and for sources FF through HH to be used in oil, gas, coal, ground water or environmental well logging. I request the following:

- 1) License 42-00090-03, 9 - Authorized Use, be amended for radioactive material P and T to “for well logging in any well” and
- 2) License 42-00090-03, 9 - Authorized Use, be amended for radioactive material S, U through CC, EE through II for well logging in any well in which the potable water aquifers are protected by casing.

**Item #2 – Authorization to perform well logging operations in wells in which the potable water aquifers are not protected by casing.**


To provide protection for the potable water aquifers, Schlumberger proposes the following restrictions for well logging in a well in which casing does not cover all potable water aquifers. These restrictions are consistent with NUREG 1556, Volume 14:

- 1) Schlumberger will only use well logging tools containing ECS's (including radioactive material 6P on license 42-00090-03) and/or neutron generators (radioactive material 6T on license 42-00090-03).
- 2) Well logging tools containing ECS's and/or neutron generators will only be placed into these wells under the following conditions:
  - a. For well logging using wireline:
    - i. The well must be evaluated using a well logging caliper before any logging tools containing ECS's and/or neutron generators are placed into the well. If the wireline tension exceeds 25% of the wireline maximum strength, well logging tools containing ECS's and/or neutron generators may not be placed in the well.
    - ii. Prior to Schlumberger placing any well logging tools containing ECS's and/or neutron generators into the well, Schlumberger shall have a written agreement with the well operator stating:
      1. At least three attempts shall be made to recover the tool, should a well logging tool containing ECS's and/or neutron generator become lodged in the well; and
      2. If the tools cannot be successfully recovered, the well shall be abandoned with all potable water aquifers covered by cement with a mechanical deflection device at the top of the cement.
  - b. For well logging using logging while drilling:
    - i. Prior to Schlumberger placing any well logging tools containing ECS's and/or neutron generators into the well, Schlumberger shall have a written agreement with the well operator stating:
      1. At least three attempts shall be made to recover the tool, should a well logging tool containing ECS's and/or neutron generators become lodged in the well; and
      2. If the tools cannot be successfully recovered, the well shall be abandoned with all potable water aquifers covered by cement with a mechanical deflection device at the top of the cement.

Schlumberger believes radioactive materials can be safely used for well logging in wells other than oil and gas wells, and under the restrictions listed above, that well logging tools containing ECS's and/or neutron generators can be safely used for well logging in wells in which casing does not cover all potable water aquifers.

Please contact me if you require any further information or clarification on this request.

Sincerely,

  
Raymond Dickes

This is to acknowledge the receipt of your letter/application dated 6-20-06, and to inform you that the initial processing, which includes an administrative review, has been performed.

7-05-06  
DATE

☒ There were no administrative omissions. Your application will be assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card:

The action you requested is normally processed within 90 days.

☐ A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 471017.  
When calling to inquire about this action, please refer to this mail control number.  
You may call me at 817-860-8103.

Sincerely,

*Colleen Murnahan*  
Licensing Assistant

BETWEEN:

License Fee Management Branch, ARM  
and  
Regional Licensing Sections

(FOR LEMS USE)  
INFORMATION FROM LTS

Program Code: 03110  
Status Code: 0  
Fee Category: 5A 2B  
Exp. Date: 20071130  
Fee Comments:  
Decom Fin Assur Req: Y

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: SCHLUMBERGER TECHNOLOGY CORP.  
Received Date: 20060622  
Docket No: 3006388  
Control No.: 471017  
License No.: 42-00090-03  
Action Type: Amendment

2. FEE ATTACHED

Amount:  
Check No.: 7

3. COMMENTS

Signed  
Date

*Colleen M. Anderson*  
*5/26/06*

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

1. Fee Category and Amount: \_\_\_\_\_

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

3. OTHER \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signed  
Date

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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**FedEx** US Airbill  
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Tracking  
Number

8565 9924 5510

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1 From This portion can be removed for Recipient's records  
Date JUN 22 2006 FedEx Tracking Number 856599245510  
Sender's Name [redacted] Phone [redacted]  
Company [redacted]  
Address [redacted] Dept./Floor/Suite/Room [redacted]  
City [redacted] State [redacted] ZIP [redacted]

**RECEIVED**  
JUN 22 2006  
DNMS

4a Express Package Service  
☐ FedEx Priority Overnight  
Next business morning \*\* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected  
☒ FedEx Standard Overnight  
Next business afternoon \* Saturday Delivery NOT available  
☐ FedEx First Overnight  
Earliest next business morning delivery to select locations \* Saturday Delivery NOT available  
☐ FedEx 2Day  
Second business day \*\* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected  
☐ FedEx Express Saver  
Third business day \* Saturday Delivery NOT available  
\* Call for Confirmation Minimum charge: One-pound rate \* To most local

4b Express Freight Service  
☐ FedEx 1Day Freight\*  
Next business day \*\* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected  
☐ FedEx 2Day Freight  
Second business day \*\* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected  
☐ FedEx 3Day Freight  
Third business day \* Saturday Delivery NOT available  
\*\* To most local

5 Packaging  
☒ FedEx Envelope\* ☐ FedEx Pak\*  
Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak  
☐ FedEx Box ☐ FedEx Tube ☐ Otr  
\* Declared value limit

6 Special Handling  
Includes FedEx address in Section 3  
☐ SATURDAY Delivery  
Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight  
☐ HOLD Weekday at FedEx Location  
Not available for FedEx First Overnight  
☐ HOLD Saturday at FedEx Location  
Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations  
Does this shipment contain dangerous goods? (this box must be checked)  
☒ No ☐ Yes As per attached Shipper's Declaration ☐ Yes Shipper's Declaration not required  
Dry Ice Dry Ice, 9, UN 1845  
Cargo Aircraft Only  
Dangerous goods (including dry ice) cannot be shipped in FedEx packaging

7 Payment Bill to:  
☒ Sender Acct. No. in Section 1 will be billed  
☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/C  
Enter FedEx Acct. No. or Credit Card No. below  
Obtain Recip. Acct. No.  
Total Packages Total Weight Total Charges  
Credit Card #

\*Our liability is limited to \$100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 NEW Residential Delivery Signature Options  
☐ No Signature Required  
Package may be left without obtaining a signature for delivery  
☐ Direct Signature  
Anyone at recipient's address may sign for delivery. Fee applies.  
☐ Indirect Signature  
If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. Fee applies.  
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RECIPIENT: PEEL HERE



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