

Raymond N. Dickes  
Radiation Safety Officer  
Explosives Safety Officer

**Schlumberger**

January 14, 2011

*All exports authorized  
under GL in 10 CFR 110.23  
BA  
1-24-2011*

Nader Mamish  
Deputy Director (Acting),  
Office of International Programs  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0011

Re: Report on Shipments of Americium-241 Contained in Petroleum Exploration  
Equipment Covered by NRC General License for 2010

Dear Mr. Mamish,

Schlumberger Technology Corporation "Schlumberger" relies on the NRC general license provided in 10 CFR 110.23 to export petroleum exploration devices (also known as "well logging" sources) containing Americium-241 (Am-241). The attached report describes Schlumberger's exports of Am-241 covered by this general license in calendar year 2010.

If you have any questions regarding this matter, please contact me.

Sincerely,

*Raymond Dickes*  
Raymond Dickes  
Radiation Safety Officer  
Schlumberger Technology Corporation

cc: Regional Administrator, NRC RIV

*Received  
1/19/11*

**Exports of Americium-241 covered by General Export License (10 CFR 110.23) that Schlumberger Technology Corporation made during 2010**

**1. Summary of Total Activity Exported by Country**

Exported to	Total Activity for the Year (curies)	Exported to	Total Activity for the Year (curies)
Angola	42	Libya	32
Australia	30.5	Malaysia	15
Brazil	187	Mexico	32
Canada	42	Norway	10
China	42	Pakistan	16
Colombia	58	Peru	31.5
Congo	30	Russia	133.5
Equatorial Guinea	7.5	Saudi Arabia	31
France	16	South Africa	32
India	42.5	Thailand	16
Indonesia	56	United Arab Emirates	15
Kuwait	32	United Kingdom	7.5

**2. Listing of Individual Exports**

All well logging sources in the listing below were exported for the intended use in well logging for petroleum exploration.

Asset ID	Description	Exported to	Approximate Export Date	End User
NSRL-G4085	Well Logging Source Am241Be 592 GBq (16 Ci)	Brazil	January 8, 2010	Schlumberger Servicio de Petroleo Ltda
NNLSCA-G6024	Well Logging Source Am241Be 296 GBq (8Ci)	Canada	January 12, 2010	Schlumberger Canada Limited
NNLSCA-G6023	Well Logging Source Am241Be 296 GBq (8Ci)	Canada	January 12, 2010	Schlumberger Canada Limited
NSRM-Q1017	Well Logging Source Am241Be 555 GBq (15 Ci)	United Arab Emirates	January 15, 2010	Anadrill International S.A.
NSRM-A275	Well Logging Source Am241Be 555 GBq (15 Ci)	Saudi Arabia	January 20, 2010	Schlumberger Middle East S.A.
NSRL-G4084	Well Logging Source Am241Be 592 GBq (16 Ci)	Thailand	February 5, 2010	Schlumberger Overseas S.A.
NSRT-Q1117	Well Logging Source Am241Be 278 GBq (7.5 Ci)	Equatorial Guinea	February 9, 2010	Schlumberger Seaco Inc
NSRU-U036	Well Logging Source Am241Be 370 GBq (10 Ci)	Indonesia	February 17, 2010	PT. Dowell Anadrill Schlumberger
NSRF-G5274	Well Logging Source Am241Be 592 GBq (16 Ci)	Angola	February 19, 2010	Schlumberger Technical Services Inc
NSRU-U035	Well Logging Source Am241Be 370 GBq (10 Ci)	Indonesia	February 19, 2010	PT. Dowell Anadrill Schlumberger

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Asset ID	Description	Exported to	Approximate Export Date	End User
NSRU-Q1136	Well Logging Source Am241Be 370 GBq (10 Ci)	Indonesia	February 24, 2010	PT. Dowell Anadrill Schlumberger
NSRU-Q1137	Well Logging Source Am241Be 370 GBq (10 Ci)	Indonesia	February 25, 2010	PT. Dowell Anadrill Schlumberger
NSRU-U038	Well Logging Source Am241Be 370 GBq (10 Ci)	Colombia	March 1, 2010	Schlumberger Surencó S.A.
NSRU-U037	Well Logging Source Am241Be 370 GBq (10 Ci)	Colombia	March 3, 2010	Schlumberger Surencó S.A.
NSRT-H17	Well Logging Source Am241Be 278 GBq (7.5 Ci)	Brazil	March 5, 2010	Schlumberger Servicio de Petróleo Ltda
NSRU-U020	Well Logging Source Am241Be 370 GBq (10 Ci)	China	March 5, 2010	Schlumberger China Offshore Services S.A.
NSRM-A70	Well Logging Source Am241Be 555 GBq (15 Ci)	Brazil	March 7, 2010	Schlumberger Servicio de Petróleo Ltda
NSRM-A33	Well Logging Source Am241Be 555 GBq (15 Ci)	Brazil	March 9, 2010	Schlumberger Servicio de Petróleo Ltda
NSRT-H18	Well Logging Source Am241Be 278 GBq (7.5 Ci)	Brazil	March 9, 2010	Schlumberger Servicio de Petróleo Ltda
NNLSCA-G6022	Well Logging Source Am241Be 296 GBq (8Ci)	Indonesia	March 10, 2010	PT. Schlumberger Geophysics Nusantara
NNLSCA-G6021	Well Logging Source Am241Be 296 GBq (8Ci)	Indonesia	March 12, 2010	PT. Schlumberger Geophysics Nusantara
NSRF-G5249	Well Logging Source Am241Be 592 GBq (16 Ci)	Pakistan	March 15, 2010	Schlumberger Seaco Inc
NSRF-G5277	Well Logging Source Am241Be 592 GBq (16 Ci)	Angola	March 16, 2010	Schlumberger Technical Services Inc
NSRF-G5264	Well Logging Source Am241Be 592 GBq (16 Ci)	Mexico	March 18, 2010	Schlumberger Offshore Services (Mex) NV
NSRF-G5262	Well Logging Source Am241Be 592 GBq (16 Ci)	Mexico	March 25, 2010	Schlumberger Offshore Services (Mex) NV
NSRF-G5236	Well Logging Source Am241Be 592 GBq (16 Ci)	Russian Federation	April 2, 2010	Schlumberger Logelco Inc
NSRL-G4075	Well Logging Source Am241Be 592 GBq (16 Ci)	Saudi Arabia	April 9, 2010	Schlumberger Middle East S.A.
NSRT-H20	Well Logging Source Am241Be 278 GBq (7.5 Ci)	India	April 11, 2010	Schlumberger Asia Services Ltd
NSRF-G5255	Well Logging Source Am241Be 592 GBq (16 Ci)	Libya	April 14, 2010	Schlumberger Overseas S.A.
NNLSCA-G6001	Well Logging Source Am241Be 296 GBq (8Ci)	Australia	April 16, 2010	Schlumberger Australia Pty Ltd
NNLSCA-G6013	Well Logging Source Am241Be 296 GBq (8Ci)	Peru	April 19, 2010	Schlumberger Del Peru S.A.
NSRT-H21	Well Logging Source Am241Be 278 GBq (7.5 Ci)	Malaysia	April 20, 2010	Schlumberger WTA (Malaysia)

**Exports of Americium-241 covered by General Export License (10 CFR 110.23) that Schlumberger Technology Corporation made during 2010**

<b>Asset ID</b>	<b>Description</b>	<b>Exported to</b>	<b>Approximate Export Date</b>	<b>End User</b>
NSRM-Q1221	Well Logging Source Am241Be 555 GBq (15 Ci)	Australia	April 30, 2010	Schlumberger Australia Pty Ltd
NSRM-Q1224	Well Logging Source Am241Be 555 GBq (15 Ci)	Colombia	May 4, 2010	Schlumberger Sureenco S.A.
NSRF-G5278	Well Logging Source Am241Be 592 GBq (16 Ci)	Kuwait	May 5, 2010	Schlumberger Oilfield Eastern Ltd.
NSRM-Q1222	Well Logging Source Am241Be 555 GBq (15 Ci)	Colombia	May 5, 2010	Schlumberger Sureenco S.A.
NSRF-G5266	Well Logging Source Am241Be 592 GBq (16 Ci)	Kuwait	May 14, 2010	Schlumberger Oilfield Eastern Ltd.
NSRL-A3108	Well Logging Source Am241Be 592 GBq (16 Ci)	South Africa	May 19, 2010	Schlumberger Logelco Inc
NSRF-A2539	Well Logging Source Am241Be 592 GBq (16 Ci)	Brazil	May 26, 2010	Schlumberger Servicio de Petroleo Ltda
NSRF-A1369	Well Logging Source Am241Be 592 GBq (16 Ci)	Brazil	May 26, 2010	Schlumberger Servicio de Petroleo Ltda
NSRU-Q1135	Well Logging Source Am241Be 370 GBq (10 Ci)	Angola	May 29, 2010	Schlumberger Technical Services Inc
NSRT-Q1118	Well Logging Source Am241Be 278 GBq (7.5 Ci)	United Kingdom	June 2, 2010	Schlumberger Offshore Services Ltd.
NSRF-G5271	Well Logging Source Am241Be 592 GBq (16 Ci)	Brazil	June 3, 2010	Schlumberger Servicio de Petroleo Ltda
NSRT-Q1102	Well Logging Source Am241Be 278 GBq (7.5 Ci)	Brazil	June 4, 2010	Schlumberger Servicio de Petroleo Ltda
NSRF-G5281	Well Logging Source Am241Be 592 GBq (16 Ci)	France	June 11, 2010	Etudes Et Productions SLB
NSRF-G5270	Well Logging Source Am241Be 592 GBq (16 Ci)	Brazil	June 13, 2010	Schlumberger Servicio de Petroleo Ltda
NSRF-G5269	Well Logging Source Am241Be 592 GBq (16 Ci)	Brazil	June 15, 2010	Schlumberger Servicio de Petroleo Ltda
NSRF-G5268	Well Logging Source Am241Be 592 GBq (16 Ci)	Brazil	June 20, 2010	Schlumberger Servicio de Petroleo Ltda
NSRF-G5272	Well Logging Source Am241Be 592 GBq (16 Ci)	South Africa	June 20, 2010	Schlumberger Logelco Inc
NSRL-G4086	Well Logging Source Am241Be 592 GBq (16 Ci)	Libya	June 27, 2010	Schlumberger Overseas S.A.
NSRF-G5245	Well Logging Source Am241Be 592 GBq (16 Ci)	Russian Federation	July 4, 2010	Schlumberger Logelco Inc
NSRU-Q1134	Well Logging Source Am241Be 370 GBq (10 Ci)	Russian Federation	July 9, 2010	Schlumberger Logelco Inc
NSRF-G5247	Well Logging Source Am241Be 592 GBq (16 Ci)	Russian Federation	July 9, 2010	Schlumberger Logelco Inc
NSRF-G5254	Well Logging Source Am241Be 592 GBq (16 Ci)	Russian Federation	July 12, 2010	Schlumberger Logelco Inc

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NSRF-G5276	Well Logging Source Am241Be 592 GBq (16 Ci)	Russian Federation	July 15, 2010	Schlumberger Logelco Inc
NSRF-G5275	Well Logging Source Am241Be 592 GBq (16 Ci)	Russian Federation	July 18, 2010	Schlumberger Logelco Inc
NSRT-Q1115	Well Logging Source Am241Be 278 GBq (7.5 Ci)	Congo	August 13, 2010	Schlumberger Logelco Inc.
NSRU-Q1132	Well Logging Source Am241Be 370 GBq (10 Ci)	Russian Federation	September 17, 2010	Schlumberger Logelco Inc.
NSRU-Q1133	Well Logging Source Am241Be 370 GBq (10 Ci)	Russian Federation	September 17, 2010	Schlumberger Logelco Inc.
NSRT-H26	Well Logging Source Am241Be 278 GBq (7.5 Ci)	India	September 23, 2010	Schlumberger Asia Services Ltd
NSRT-H25	Well Logging Source Am241Be 278 GBq (7.5 Ci)	India	September 24, 2010	Schlumberger Asia Services Ltd
NSRU-Q1090	Well Logging Source Am241Be 370 GBq (10 Ci)	India	October 2, 2010	Schlumberger Asia Services Ltd
NSRU-Q1091	Well Logging Source Am241Be 370 GBq (10 Ci)	India	October 3, 2010	Schlumberger Asia Services Ltd
NSRT-H31	Well Logging Source Am241Be 278 GBq (7.5 Ci)	Malaysia	October 6, 2010	Schlumberger WTA (Malaysia)
NSRT-H32	Well Logging Source Am241Be 278 GBq (7.5 Ci)	Congo	October 8, 2010	Schlumberger Logelco Inc.
NNLSCA-G6020	Well Logging Source Am241Be 296 GBq (8Ci)	Colombia	October 11, 2010	Schlumberger Surenco S.A.
NSRT-H30	Well Logging Source Am241Be 278 GBq (7.5 Ci)	Australia	October 22, 2010	Schlumberger Australia Pty Ltd
NSRF-G5279	Well Logging Source Am241Be 592 GBq (16 Ci)	Canada	October 26, 2010	Schlumberger Canada Limited
NSRT-Q1121	Well Logging Source Am241Be 278 GBq (7.5 Ci)	Congo	October 29, 2010	Schlumberger Logelco Inc.
NSRT-Q1119	Well Logging Source Am241Be 278 GBq (7.5 Ci)	Russian Federation	October 31, 2010	Schlumberger Logelco Inc.
NSRU-N0371	Well Logging Source Am241Be 370 GBq (10 Ci)	Canada	November 6, 2010	Schlumberger Canada Limited
NSRT-H23	Well Logging Source Am241Be 278 GBq (7.5 Ci)	Brazil	November 8, 2010	Schlumberger Servicio de Petroleo Ltda
NSRU-Q1138	Well Logging Source Am241Be 370 GBq (10 Ci)	Norway	November 15, 2010	Schlumberger Norge AS
NSRT-Q1120	Well Logging Source Am241Be 278 GBq (7.5 Ci)	Congo	November 18, 2010	Schlumberger Logelco Inc.
NSRT-H29	Well Logging Source Am241Be 278 GBq (7.5 Ci)	Peru	November 21, 2010	Schlumberger Del Peru S.A.
NSRT-H24	Well Logging Source Am241Be 278 GBq (7.5 Ci)	Brazil	November 22, 2010	Schlumberger Servicio de Petroleo Ltda

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NSRL -G4089	Well Logging Source Am241Be 592 GBq (16 Ci)	China	November 22, 2010	Schlumberger China Offshore Services S.A.
NSRF-G5283	Well Logging Source Am241Be 592 GBq (16 Ci)	China	November 23, 2010	Schlumberger China Offshore Services S.A.
NSRF-G5291	Well Logging Source Am241Be 592 GBq (16 Ci)	Peru	December 5, 2010	Schlumberger Del Peru S.A.
NSRT-H22	Well Logging Source Am241Be 278 GBq (7.5 Ci)	Brazil	December 9, 2010	Schlumberger Servicio de Petroleo Ltda