

Memorial

Hospital of South Bend®

February 4, 2010

U. S. Nuclear Regulatory Commission
Materials Licensing Section
Attn: Colleen Carol Casey
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

Re: Additional information for control number 318608,
NRC Materials License No. 13-18881-01

Dear Ms. Casey:

This letter is in reference to your correspondence dated January 25, 2010 which requested additional information for two of our recent license amendment requests. First, we requested in a letter dated November 18, 2009 that Eric F. Lucas, M.S. be added to our license as an Authorized Medical Physicist for HDR. Our submitted paperwork neglected to state the date of his master's degree. Mr. Lucas received his Master of Science in Medical Radiation Physics from Rosalind Franklin University of Medicine and Science on June 6, 2008. I have attached a copy of his diploma along with NRC Form 313a (AMP).

Also, we requested that the Cs-137 sources permitted by 10 CFR 35.400 listed on our license in item 9.D be removed. Our Cs-137 sources were disposed of with the help of the CRCPD's SCATR program and were transferred to RAM Services, Inc of Two Rivers, WI. I provided you with documentation of the transfer of the sources to RAM Services, but I neglected to include copies of the wipe tests which were performed on the sources prior to disposal. Please see the attached wipe tests on each source disposed. These wipe tests were performed three days prior to the transfer of the sources. The room where the Cesium sources were stored is still used to store I-125 and Pd-103 brachytherapy sources so we do not wish to delete that room from our license as a radioactive materials storage room.

Finally, I have a new request. Please remove Dr. Joel Cohen, M.D. from our Authorized Users list, and remove Jennifer Hann Fisher, M.S. from our Authorized Medical Physicists list. Both of these individuals no longer practice at our facility.

If you have any questions, please feel free to contact me directly at 574-647-7956 or by email at darchambeault@memorialsb.org.

Sincerely,



Daniel J. Archambeault, M.S., DABMP
Radiation Safety Officer

RECEIVED FEB 05 2010

**AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE
AND PRECEPTOR ATTESTATION
[10 CFR 35.51]**

APPROVED BY OMB: NO. 3150-0120
EXPIRES: 3/31/2012

Name of Proposed Authorized Medical Physicist

Eric F. Lucas, M.S.

- Requested Authorization(s) (check all that apply)**
- 35.400 Ophthalmic use of strontium-90 35.600 Teletherapy unit(s)
- 35.600 Remote afterloader unit(s) 35.600 Gamma stereotactic radiosurgery unit(s)

PART I -- TRAINING AND EXPERIENCE
(Select one of the three methods below)

*Training and Experience, including Board Certification, must have been obtained within the 7 years preceding the date of application or the individual must have obtained related continuing education and experience since the required training and experience was completed. Provide dates, duration, and description of continuing education and experience related to the uses checked above.

- 1. Board Certification**
- a. Provide a copy of the board certification.
- b. Go to the table in 3.c. and describe training provider and dates of training for each type of use for which authorization is sought.
- c. Skip to and complete Part II Preceptor Attestation.
- 2. Current Authorized Medical Physicist Seeking Additional Authorization for use(s) checked above**
- a. Go to the table in section 3.c. to document training for new device.
- b. Skip to and complete Part II Preceptor Attestation
- 3. Education, Training, and Experience for Proposed Authorized Medical Physicist**
- a. Education: Document master's or doctor's degree in physics, medical physics, other physical science, engineering, or applied mathematics from an accredited college or university.

Degree	Major Field
M.S.	Medical Radiation Physics
College or University	
Rosalind Franklin University of Medicine and Science, North Chicago, IL	

- b. Supervised Full-Time Medical Physics Training and Work Experience in clinical radiation facilities that provide high-energy external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services.
- Yes. Completed 1 year of full-time training in medical physics (for areas identified below) under the supervision of John Fan, PhD/Daniel Archambeault, MS who meets the requirements for an Authorized Medical Physicist.

AND

- Yes. Completed 1 year of full-time work experience in medical physics (for areas identified below) under the supervision of Daniel J. Archambeault, M.S., DABMP who meets the requirements for an Authorized Medical Physicist.

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)

b. Supervised Full-Time Medical Physics Training and Work Experience (continued)

If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.

Description of Training/ Experience	Location of Training/License or Permit Number of Training Facility/Medical Devices Used+	Dates of Training*	Dates of Work Experience*
Medical Physics	Edward Cancer Center, Naperville, IL Illinois license #IL-01232-01 Varian iX S/N 291001 & Varian Trilogy S/N 291119 Varian HDR VariSource VS343	Nov 2007 - May 2008	N/A
Performing sealed source leak tests and inventories	Edward Cancer Center, Naperville, IL Illinois license #IL-01232-01 Varian HDR VariSource VS343	Nov 2007 - May 2008	N/A
Performing decay corrections	Edward Cancer Center, Naperville, IL Illinois license #IL-01232-01 Varian HDR VariSource VS34	Nov 2007 - May 2008	N/A
Performing full calibration and periodic spot checks of external beam treatment unit(s)	Edward Cancer Center, Naperville, IL Illinois license #IL-01232-01 Varian iX S/N 291001 & Varian Trilogy S/N 291119	Nov 2007 - May 2008	N/A
Performing full calibration and periodic spot checks of stereotactic radiosurgery unit(s)	Edward Cancer Center, Naperville, IL Illinois license #IL-01232-01 Varian Trilogy S/N 291119	Nov 2007 - May 2008	N/A
Performing full calibration and periodic spot checks of remote afterloading unit(s)	Edward Cancer Center, Naperville, IL Illinois license #IL-01232-01 Varian HDR VariSource VS34	Nov 2007 - May 2008	N/A
Conducting radiation surveys around external beam treatment unit(s), stereotactic radiosurgery unit(s), remote after loading unit(s)	Edward Cancer Center, Naperville, IL Illinois license #IL-01232-01 Varian HDR VariSource VS34	Nov 2007 - May 2008	N/A

Supervising Individual**

John Fan, Ph.D., DABR

License/Permit Number listing supervising individual as an authorized Medical Physicist

Illinois license #IL-01232-01

for the following types of use:

- Remote afterloader unit(s) Teletherapy unit(s) Gamma stereotactic radiosurgery unit(s)

+ Training and work experience must be conducted in clinical radiation facilities that provide high-energy external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services.

* 1 year of Full-time medical physics training and 1 year of full time work experience cannot be concurrent.

** If the supervising medical physicist is not an authorized medical physicist, the licensee must submit evidence that the supervising medical physicist meets the training and experience requirements in 10 CFR 35.51 and 35.59 for the types of use for which the individual is seeking authorization.

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)

b. Supervised Full-Time Medical Physics Training and Work Experience (continued)

If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.

Description of Training/ Experience	Location of Training/License or Permit Number of Training Facility/Medical Devices Used+	Dates of Training*	Dates of Work Experience*
Medical Physics	Memorial Hospital of South Bend NRC license 13-18881-01 IN registration 10094 Varian Trilogy s/n 1129 Varian 21EX s/n 2233 Varian GammaMed Plus HDR unit	May 2008 - October 2008	November 2008 - October 2009
Performing sealed source leak tests and inventories	Memorial Hospital of South Bend NRC license 13-18881-01 Varian GammaMed Plus HDR unit	May 2008 - October 2008	November 2008 - October 2009
Performing decay corrections	Memorial Hospital of South Bend NRC license 13-18881-01 Varian GammaMed Plus HDR unit	May 2008 - October 2008	November 2008 - October 2009
Performing full calibration and periodic spot checks of external beam treatment unit(s)	Memorial Hospital of South Bend NRC license 13-18881-01 IN registration 10094 Varian Trilogy s/n 1129 Varian 21EX s/n 2233	May 2008 - October 2008	November 2008 - October 2009
Performing full calibration and periodic spot checks of stereotactic radiosurgery unit(s)	Memorial Hospital of South Bend NRC license 13-18881-01 IN registration 10094 Varian Trilogy s/n 1129	May 2008 - October 2008	November 2008 - October 2009
Performing full calibration and periodic spot checks of remote afterloading unit(s)	Memorial Hospital of South Bend NRC license 13-18881-01 Varian GammaMed Plus HDR unit	May 2008 - October 2008 (1 calib & 2 spot checks)	November 2008 - October 2009 (4 calib & 9 spot checks)
Conducting radiation surveys around external beam treatment unit(s), stereotactic radiosurgery unit(s), remote after loading unit(s)	Memorial Hospital of South Bend NRC license 13-18881-01 Varian GammaMed Plus HDR unit	May 2008 - October 2008 (57 HDR surveys)	November 2008 - October 2009 (over 150 HDR surveys)

Supervising Individual**
Daniel J. Archambeault, M.S., DABMP

License/Permit Number listing supervising individual as an authorized Medical Physicist
NRC License #13-18881-01

for the following types of use:

- Remote afterloader unit(s) Teletherapy unit(s) Gamma stereotactic radiosurgery unit(s)

+ Training and work experience must be conducted in clinical radiation facilities that provide high-energy external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services.

* 1 year of Full-time medical physics training and 1 year of full time work experience cannot be concurrent.

** If the supervising medical physicist is not an authorized medical physicist, the licensee must submit evidence that the supervising medical physicist meets the training and experience requirements in 10 CFR 35.51 and 35.59 for the types of use for which the individual is seeking authorization.

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)

c. Describe training provider and dates of training for each type of use for which authorization is sought.

Description of Training	Training Provider and Dates		
	Remote Afterloader	Teletherapy	Gamma Stereotactic Radiosurgery
Hands-on device operation	From November 2007 until May 2008, participated in daily QA and safety checks on the HDR unit under the supervision of John Fan, Ph.D.		
Safety procedures for the device use	Received safety training on the HDR unit from John Fan, Ph.D.		
Clinical use of the device	From November 2007 until May 2008, participated in over 100 patient treatments on the HDR unit under the supervision of John Fan, Ph.D.		
Treatment planning system operation	From November 2007 until May 2008, participated in the planning of Mammosite and vaginal cylinder cases under the supervision of John Fan, Ph.D.		
Supervising Individual <i>If training is provided by Supervising Medical Physicist, (If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)</i>		License/Permit Number listing supervising individual as an authorized Medical Physicist	
John Fan, Ph.D., DABR		Illinois license #IL-01232-01	
for the following types of use:			
<input checked="" type="checkbox"/> Remote afterloader unit(s) <input type="checkbox"/> Teletherapy unit(s) <input type="checkbox"/> Gamma stereotactic radiosurgery unit(s)			

If Applicable:

Authorization Sought	Device	Training Provided By	Dates of Training
35.400 Ophthalmic Use of strontium-90			

d. Skip to and complete Part II Preceptor Attestation.

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)

c. Describe training provider and dates of training for each type of use for which authorization is sought.

Description of Training	Training Provider and Dates		
	Remote Afterloader	Teletherapy	Gamma Stereotactic Radiosurgery
Hands-on device operation	From May 2008 until November 2009, participated in over 120 daily QA and safety checks on the HDR unit under the supervision of Daniel Archambeault, M.S.		
Safety procedures for the device use	Attended safety inservices on: 8/8/08 & 5/19/09 given by Daniel Archambeault, M.S.		
Clinical use of the device	From May 2008 until November 2009, participated in over 200 HDR procedures under the supervision of Daniel Archambeault, M.S.		
Treatment planning system operation	From May 2008 until November 2009, participated in the treatment planning of over 60 HDR cases under the supervision of Daniel Archambeault, M.S.		
Supervising Individual <i>If training is provided by Supervising Medical Physicist, (If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)</i>		License/Permit Number listing supervising individual as an authorized Medical Physicist	
Daniel Archambeault, M.S., DABMP		NRC License #13-18881-01	
for the following types of use:			
<input checked="" type="checkbox"/> Remote afterloader unit(s) <input type="checkbox"/> Teletherapy unit(s) <input type="checkbox"/> Gamma stereotactic radiosurgery unit(s)			

If Applicable:

Authorization Sought	Device	Training Provided By	Dates of Training
35.400 Ophthalmic Use of strontium-90			

d. Skip to and complete Part II Preceptor Attestation.

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

PART II – PRECEPTOR ATTESTATION

Note: This part must be completed by the individual's preceptor. The preceptor does not have to be the supervising individual as long as the preceptor provides, directs, or verifies training and experience required. If more than one preceptor is necessary to document experience, obtain a separate preceptor statement from each.

First Section

Check one of the following:

1. Board Certification

I attest that _____ has satisfactorily completed the requirements in
Name of Proposed Authorized Medical Physicist
10 CFR 35.51(a)(1) and (a)(2).

OR

2. Education, Training, and Experience

I attest that Eric F. Lucas has satisfactorily completed the 1-year of full-time
Name of Proposed Authorized Medical Physicist
training in medical physics and an additional year of full-time work experience as required by 10 CFR 35.51(b)(1).

AND

Second Section

Complete the following:

I attest that Eric F. Lucas has training for the types of use for which authorization
Name of Proposed Authorized Medical Physicist
is sought that include hands-on device operation, safety procedures, clinical use, and the operation of a treatment planning system.

AND

Third Section

Complete the following:

I attest that Eric F. Lucas has achieved a level of competency sufficient to
Name of Proposed Authorized Medical Physicist
function independently as an Authorized Medical Physicist for the following:

- 35.400 Ophthalmic use of strontium-90 35.600 Teletherapy unit(s)
- 35.600 Remote afterloader unit(s) 35.600 Gamma stereotactic radiosurgery unit(s)

AND

Fourth Section

Complete the following for preceptor attestation and signature:

I meet the requirements in 10 CFR 35.51, or equivalent Agreement State requirements for Authorized Medical Physicist for the following:

- 35.400 Ophthalmic use of strontium-90 35.600 Teletherapy unit(s)
- 35.600 Remote afterloader unit(s) 35.600 Gamma stereotactic radiosurgery unit(s)

Name of Preceptor	Signature	Telephone Number	Date
Daniel J. Archambeault, M.S., DABMP	<i>Daniel J. Archambeault</i>	(574) 647-7956	2/4/10
License/Permit Number/Facility Name			

ROSALIND FRANKLIN UNIVERSITY

OF MEDICINE AND SCIENCE

*on the recommendation of the College of Health Professions
the Board of Trustees has conferred the degree of*

MASTER OF SCIENCE

—IN—

MEDICAL RADIATION PHYSICS

upon

Eric Francis Lucas

who has honorably fulfilled all the requirements for that degree.

*Given in the city of North Chicago, Illinois,
this 6th day of June, 2008.*



Ruth M. Rothstein
Chairman, Board of Trustees

Ky Selzer
President

Wendy R. Heault
Dean

CERTIFIED TO BE A TRUE COPY

Maryann Decaire

MARYANN DECAIRE ASSOCIATE VICE
PRESIDENT OF ENROLLMENT SERVICES
ROSALIND FRANKLIN UNIVERSITY
OF MEDICINE AND SCIENCE



STATE OF WISCONSIN RADIOACTIVE MATERIALS LICENSE 071-1234-01

SEALED SOURCE LEAK TEST CERTIFICATE			
RAM ACCESSION NO.		63452	
GENERAL CERTIFICATE			
LOCATION		- SOUTH BEND	
CONTACT PERSON	DANIEL ARCHAMBEAULT	TELEPHONE	574-647-7956
MEMORIAL HOSPITAL OF SOUTH BEND 615 N. MICHIGAN ST SOUTH BEND, IN 46601 U.S.A.			
LEAK TEST ANALYSIS			
SOURCE MODEL	6502	DEVICE/TOOL NUMBER	
SOURCE SERIAL NO.	3302	MANUFACTURER S/N	
ISOTOPE	CS-137	SOURCE ORIGINAL ACTIVITY	22 5000 mCi 0.8325 GBq
DATE SOURCE WIPED	08 Sep 2008	REASON FOR TEST	DISPOSAL
ANALYSIS DATE	09 Sep 2008	ANALYTICAL METHOD	Liquid Scintillation Counting
RAW SAMPLE COUNT	31.9716 cpm	INSTRUMENT	Beckman LS 6500 706-9054
BACKGROUND	37.00000 cpm	COUNTING EFFICIENCY	95.00%
NET SAMPLE COUNT	-5.02842 cpm	MINIMUM DETECTABLE ACTIVITY	1.48E-05 µCi 0.55 Bq
SAMPLE ANALYSIS ACTIVITY	0.000 µCi 0.000 Bq	PASS/FAIL CRITERION	0.005 µCi 185 Bq
SOURCE PASSES TEST		ACTION LEVEL	0.001 µCi 37 Bq
ANALYST	Jerry Wiza	<i>Jerry P. Wiza</i>	
NOTES:	[] [BRACHYTHERAPY SEED] []		



STATE OF WISCONSIN RADIOACTIVE MATERIALS LICENSE 071-1234-01

SEALED SOURCE LEAK TEST CERTIFICATE			
RAM ACCESSION NO.		63453	
GENERAL CERTIFICATE			
LOCATION		- SOUTH BEND	
CONTACT PERSON		DANIEL ARCHAMBEAULT	TELEPHONE 574-647-7956
MEMORIAL HOSPITAL OF SOUTH BEND 615 N. MICHIGAN ST SOUTH BEND, IN 46601 U.S.A.			
LEAK TEST ANALYSIS			
SOURCE MODEL	6502	DEVICE/TOOL NUMBER	
SOURCE SERIAL NO.	3312	MANUFACTURER S/N	
ISOTOPE	CS-137	SOURCE ORIGINAL ACTIVITY	22.5000 mCi 0.8325 GBq
DATE SOURCE WIPED	08 Sep 2008	REASON FOR TEST	DISPOSAL
ANALYSIS DATE	09 Sep 2008	ANALYTICAL METHOD	Liquid Scintillation Counting
RAW SAMPLE COUNT	44.1945 cpm	INSTRUMENT	Beckman LS 6500 706-9054
BACKGROUND	37.00000 cpm	COUNTING EFFICIENCY	95.00%
NET SAMPLE COUNT	7.19453 cpm	MINIMUM DETECTABLE ACTIVITY	1.48E-05 µCi 0.55 Bq
SAMPLE ANALYSIS ACTIVITY	3.241E-06 µCi 0.120 Bq	PASS/FAIL CRITERION	0.005 µCi 185 Bq
SOURCE PASSES TEST		ACTION LEVEL	0.001 µCi 37 Bq
ANALYST	Jerry Wiza	<i>Jerry P. Wiza</i>	
NOTES:	[] [BRACHYTHERAPY SEED] []		



STATE OF WISCONSIN RADIOACTIVE MATERIALS LICENSE 071-1234-01

SEALED SOURCE LEAK TEST CERTIFICATE			
RAM ACCESSION NO.		63454	
GENERAL CERTIFICATE			
LOCATION		- SOUTH BEND	
CONTACT PERSON	DANIEL ARCHAMBEAULT	TELEPHONE	574-647-7956
MEMORIAL HOSPITAL OF SOUTH BEND 615 N. MICHIGAN ST SOUTH BEND, IN 46601 U.S.A.			
LEAK TEST ANALYSIS			
SOURCE MODEL	6502	DEVICE/TOOL NUMBER	
SOURCE SERIAL NO.	3311	MANUFACTURER S/N	
ISOTOPE	CS-137	SOURCE ORIGINAL ACTIVITY	22.4000 mCi 0.8288 GBq
DATE SOURCE WIPED	08 Sep 2008	REASON FOR TEST	DISPOSAL
ANALYSIS DATE	09 Sep 2008	ANALYTICAL METHOD	Liquid Scintillation Counting
RAW SAMPLE COUNT	29.8313 cpm	INSTRUMENT	Beckman LS 6500 706-9054
BACKGROUND	37.00000 cpm	COUNTING EFFICIENCY	95.00%
NET SAMPLE COUNT	-7.16874 cpm	MINIMUM DETECTABLE ACTIVITY	1.48E-05 µCi 0.55 Bq
SAMPLE ANALYSIS ACTIVITY	0.000 µCi 0.000 Bq	PASS/FAIL CRITERION	0.005 µCi 185 Bq
SOURCE PASSES TEST		ACTION LEVEL	0.001 µCi 37 Bq
ANALYST	Jerry Wiza	<i>Jerry P. Wiza</i>	
NOTES:	[] [BRACHYTHERAPY SEED] []		



STATE OF WISCONSIN RADIOACTIVE MATERIALS LICENSE 071-1234-01

SEALED SOURCE LEAK TEST CERTIFICATE			
RAM ACCESSION NO.		63455	
GENERAL CERTIFICATE			
LOCATION		- SOUTH BEND	
CONTACT PERSON	DANIEL ARCHAMBEAULT	TELEPHONE	574-647-7956
MEMORIAL HOSPITAL OF SOUTH BEND 615 N. MICHIGAN ST SOUTH BEND, IN 46601 U.S.A.			
LEAK TEST ANALYSIS			
SOURCE MODEL	6502	DEVICE/TOOL NUMBER	
SOURCE SERIAL NO.	3322	MANUFACTURER S/N	
ISOTOPE	CS-137	SOURCE ORIGINAL ACTIVITY	22.0000 mCi 0.8140 GBq
DATE SOURCE WIPED	08 Sep 2008	REASON FOR TEST	DISPOSAL
ANALYSIS DATE	09 Sep 2008	ANALYTICAL METHOD	Liquid Scintillation Counting
RAW SAMPLE COUNT	38.0294 cpm	INSTRUMENT	Beckman LS 6500 706-9054
BACKGROUND	37.00000 cpm	COUNTING EFFICIENCY	95.00%
NET SAMPLE COUNT	1.02937 cpm	MINIMUM DETECTABLE ACTIVITY	1.48E-05 µCi 0.55 Bq
SAMPLE ANALYSIS ACTIVITY	0.464E-06 µCi 0.017 Bq	PASS/FAIL CRITERION	0.005 µCi 185 Bq
SOURCE PASSES TEST		ACTION LEVEL	0.001 µCi 37 Bq
ANALYST	Jerry Wiza	<i>Jerry P. Wiza</i>	
NOTES:	[] [BRACHYTHERAPY SEED] []		

PRINTED IN THE UNITED STATES OF AMERICA

510 COUNTY HIGHWAY V ▲ TWO RIVERS, WISCONSIN 54241 ▲ VOICE: +1. 920.686.3889 FAX: 1.920.686.3899



STATE OF WISCONSIN RADIOACTIVE MATERIALS LICENSE 071-1234-01

SEALED SOURCE LEAK TEST CERTIFICATE			
RAM ACCESSION NO.		63456	
GENERAL CERTIFICATE			
LOCATION		- SOUTH BEND	
CONTACT PERSON	DANIEL ARCHAMBEAULT	TELEPHONE	574-647-7956
MEMORIAL HOSPITAL OF SOUTH BEND 615 N. MICHIGAN ST SOUTH BEND, IN 46601 U.S.A.			
LEAK TEST ANALYSIS			
SOURCE MODEL	6502	DEVICE/TOOL NUMBER	
SOURCE SERIAL NO.	3314	MANUFACTURER S/N	
ISOTOPE	CS-137	SOURCE ORIGINAL ACTIVITY	22.5000 mCi 0.8325 GBq
DATE SOURCE WIPED	08 Sep 2008	REASON FOR TEST	DISPOSAL
ANALYSIS DATE	09 Sep 2008	ANALYTICAL METHOD	Liquid Scintillation Counting
RAW SAMPLE COUNT	29.7907 cpm	INSTRUMENT	Beckman LS 6500 706-9054
BACKGROUND	37.00000 cpm	COUNTING EFFICIENCY	95.00%
NET SAMPLE COUNT	-7.20926 cpm	MINIMUM DETECTABLE ACTIVITY	1.48E-05 µCi 0.55 Bq
SAMPLE ANALYSIS ACTIVITY	0.000 µCi 0.000 Bq	PASS/FAIL CRITERION	0.005 µCi 185 Bq
SOURCE PASSES TEST		ACTION LEVEL	0.001 µCi 37 Bq
ANALYST	Jerry Wiza	<i>Jerry P. Wiza</i>	
NOTES:	[] [BRACHYTHERAPY SEED] []		



STATE OF WISCONSIN RADIOACTIVE MATERIALS LICENSE 071-1234-01

SEALED SOURCE LEAK TEST CERTIFICATE			
RAM ACCESSION NO.		63457	
GENERAL CERTIFICATE			
LOCATION		- SOUTH BEND	
CONTACT PERSON	DANIEL ARCHAMBEAULT	TELEPHONE	574-647-7956
MEMORIAL HOSPITAL OF SOUTH BEND 615 N. MICHIGAN ST SOUTH BEND, IN 46601 U.S.A.			
LEAK TEST ANALYSIS			
SOURCE MODEL	6502	DEVICE/TOOL NUMBER	
SOURCE SERIAL NO.	3320	MANUFACTURER S/N	
ISOTOPE	CS-137	SOURCE ORIGINAL ACTIVITY	22.5000 mCi 0.8325 GBq
DATE SOURCE WIPED	08 Sep 2008	REASON FOR TEST	DISPOSAL
ANALYSIS DATE	09 Sep 2008	ANALYTICAL METHOD	Liquid Scintillation Counting
RAW SAMPLE COUNT	21.6147 cpm	INSTRUMENT	Beckman LS 6500 706-9054
BACKGROUND	37.00000 cpm	COUNTING EFFICIENCY	95.00%
NET SAMPLE COUNT	-15.3853 cpm	MINIMUM DETECTABLE ACTIVITY	1.48E-05 µCi 0.55 Bq
SAMPLE ANALYSIS ACTIVITY	0.000 µCi 0.000 Bq	PASS/FAIL CRITERION	0.005 µCi 185 Bq
SOURCE PASSES TEST		ACTION LEVEL	0.001 µCi 37 Bq
ANALYST	Jerry Wiza	<i>Jerry P. Wiza</i>	
NOTES:	[] [BRACHYTHERAPY SEED] []		



STATE OF WISCONSIN RADIOACTIVE MATERIALS LICENSE 071-1234-01

SEALED SOURCE LEAK TEST CERTIFICATE			
RAM ACCESSION NO.		63458	
GENERAL CERTIFICATE			
LOCATION		- SOUTH BEND	
CONTACT PERSON	DANIEL ARCHAMBEAULT	TELEPHONE	574-647-7956
MEMORIAL HOSPITAL OF SOUTH BEND 615 N. MICHIGAN ST SOUTH BEND, IN 46601 U.S.A.			
LEAK TEST ANALYSIS			
SOURCE MODEL	6503	DEVICE/TOOL NUMBER	
SOURCE SERIAL NO.	2307	MANUFACTURER S/N	
ISOTOPE	CS-137	SOURCE ORIGINAL ACTIVITY	29.7000 mCi 1.0989 GBq
DATE SOURCE WIPED	08 Sep 2008	REASON FOR TEST	DISPOSAL
ANALYSIS DATE	09 Sep 2008	ANALYTICAL METHOD	Liquid Scintillation Counting
RAW SAMPLE COUNT	21.8468 cpm	INSTRUMENT	Beckman LS 6500 706-9054
BACKGROUND	37.00000 cpm	COUNTING EFFICIENCY	95.00%
NET SAMPLE COUNT	-15.1532 cpm	MINIMUM DETECTABLE ACTIVITY	1.48E-05 µCi 0.55 Bq
SAMPLE ANALYSIS ACTIVITY	0.000 µCi 0.000 Bq	PASS/FAIL CRITERION	0.005 µCi 185 Bq
SOURCE PASSES TEST		ACTION LEVEL	0.001 µCi 37 Bq
ANALYST	Jerry Wiza	<i>Jerry P. Wiza</i>	
NOTES:	[] [BRACHYTHERAPY SEED] []		



STATE OF WISCONSIN RADIOACTIVE MATERIALS LICENSE 071-1234-01

SEALED SOURCE LEAK TEST CERTIFICATE			
RAM ACCESSION NO.		63459	
GENERAL CERTIFICATE			
LOCATION		- SOUTH BEND	
CONTACT PERSON	DANIEL ARCHAMBEAULT	TELEPHONE	574-647-7956
MEMORIAL HOSPITAL OF SOUTH BEND 615 N. MICHIGAN ST SOUTH BEND, IN 46601 U.S.A.			
LEAK TEST ANALYSIS			
SOURCE MODEL	6503	DEVICE/TOOL NUMBER	
SOURCE SERIAL NO.	2309	MANUFACTURER S/N	
ISOTOPE	CS-137	SOURCE ORIGINAL ACTIVITY	29.5000 mCi 1.0915 GBq
DATE SOURCE WIPED	08 Sep 2008	REASON FOR TEST	DISPOSAL
ANALYSIS DATE	09 Sep 2008	ANALYTICAL METHOD	Liquid Scintillation Counting
RAW SAMPLE COUNT	38.0247 cpm	INSTRUMENT	Beckman LS 6500 706-9054
BACKGROUND	37.00000 cpm	COUNTING EFFICIENCY	95.00%
NET SAMPLE COUNT	1.02474 cpm	MINIMUM DETECTABLE ACTIVITY	1.48E-05 µCi 0.55 Bq
SAMPLE ANALYSIS ACTIVITY	0.462E-06 µCi 0.017 Bq	PASS/FAIL CRITERION	0.005 µCi 185 Bq
SOURCE PASSES TEST		ACTION LEVEL	0.001 µCi 37 Bq
ANALYST	Jerry Wiza	<i>Jerry P. Wiza</i>	
NOTES:	[] [BRACHYTHERAPY SEED] []		



STATE OF WISCONSIN RADIOACTIVE MATERIALS LICENSE 071-1234-01

SEALED SOURCE LEAK TEST CERTIFICATE			
RAM ACCESSION NO.		63460	
GENERAL CERTIFICATE			
LOCATION		- SOUTH BEND	
CONTACT PERSON	DANIEL ARCHAMBEAULT	TELEPHONE	574-647-7956
MEMORIAL HOSPITAL OF SOUTH BEND 615 N. MICHIGAN ST SOUTH BEND, IN 46601 U.S.A.			
LEAK TEST ANALYSIS			
SOURCE MODEL	6503	DEVICE/TOOL NUMBER	
SOURCE SERIAL NO.	2304	MANUFACTURER S/N	
ISOTOPE	CS-137	SOURCE ORIGINAL ACTIVITY	29.9000 mCi 1.1063 GBq
DATE SOURCE WIPED	08 Sep 2008	REASON FOR TEST	PERIODIC
ANALYSIS DATE	09 Sep 2008	ANALYTICAL METHOD	Liquid Scintillation Counting
RAW SAMPLE COUNT	22.7229 cpm	INSTRUMENT	Beckman LS 6500 706-9054
BACKGROUND	37.00000 cpm	COUNTING EFFICIENCY	95.00%
NET SAMPLE COUNT	-14.2771 cpm	MINIMUM DETECTABLE ACTIVITY	1.48E-05 µCi 0.55 Bq
SAMPLE ANALYSIS ACTIVITY	0.000 µCi 0.000 Bq	PASS/FAIL CRITERION	0.005 µCi 185 Bq
SOURCE PASSES TEST		ACTION LEVEL	0.001 µCi 37 Bq
ANALYST	Jerry Wiza	<i>Jerry P. Wiza</i>	
NOTES:	[] [BRACHYTHERAPY SEED] []		



STATE OF WISCONSIN RADIOACTIVE MATERIALS LICENSE 071-1234-01

SEALED SOURCE LEAK TEST CERTIFICATE			
RAM ACCESSION NO.		63461	
GENERAL CERTIFICATE			
LOCATION		- SOUTH BEND	
CONTACT PERSON	DANIEL ARCHAMBEAULT	TELEPHONE	574-647-7956
MEMORIAL HOSPITAL OF SOUTH BEND 615 N. MICHIGAN ST SOUTH BEND, IN 46601 U.S.A.			
LEAK TEST ANALYSIS			
SOURCE MODEL	6503	DEVICE/TOOL NUMBER	
SOURCE SERIAL NO.	2305	MANUFACTURER S/N	
ISOTOPE	CS-137	SOURCE ORIGINAL ACTIVITY	30.2000 mCi 1.1174 GBq
DATE SOURCE WIPED	08 Sep 2008	REASON FOR TEST	DISPOSAL
ANALYSIS DATE	09 Sep 2008	ANALYTICAL METHOD	Liquid Scintillation Counting
RAW SAMPLE COUNT	28.8173 cpm	INSTRUMENT	Beckman LS 6500 706-9054
BACKGROUND	37.00000 cpm	COUNTING EFFICIENCY	95.00%
NET SAMPLE COUNT	-8.18274 cpm	MINIMUM DETECTABLE ACTIVITY	1.48E-05 µCi 0.55 Bq
SAMPLE ANALYSIS ACTIVITY	0.000 µCi 0.000 Bq	PASS/FAIL CRITERION	0.005 µCi 185 Bq
SOURCE PASSES TEST		ACTION LEVEL	0.001 µCi 37 Bq
ANALYST	Jerry Wiza	<i>Jerry P. Wiza</i>	
NOTES:	[] [BRACHYTHERAPY SEED] []		



STATE OF WISCONSIN RADIOACTIVE MATERIALS LICENSE 071-1234-01

SEALED SOURCE LEAK TEST CERTIFICATE			
RAM ACCESSION NO.		63462	
GENERAL CERTIFICATE			
LOCATION		- SOUTH BEND	
CONTACT PERSON	DANIEL ARCHAMBEAULT	TELEPHONE	574-647-7956
MEMORIAL HOSPITAL OF SOUTH BEND 615 N. MICHIGAN ST SOUTH BEND, IN 46601 U.S.A.			
LEAK TEST ANALYSIS			
SOURCE MODEL	6503	DEVICE/TOOL NUMBER	
SOURCE SERIAL NO.	2308	MANUFACTURER S/N	
ISOTOPE	CS-137	SOURCE ORIGINAL ACTIVITY	30.6000 mCi 1.1322 GBq
DATE SOURCE WIPED	08 Sep 2008	REASON FOR TEST	DISPOSAL
ANALYSIS DATE	09 Sep 2008	ANALYTICAL METHOD	Liquid Scintillation Counting
RAW SAMPLE COUNT	27.7783 cpm	INSTRUMENT	Beckman LS 6500 706-9054
BACKGROUND	37.00000 cpm	COUNTING EFFICIENCY	95.00%
NET SAMPLE COUNT	-9.22168 cpm	MINIMUM DETECTABLE ACTIVITY	1.48E-05 µCi 0.55 Bq
SAMPLE ANALYSIS ACTIVITY	0.000 µCi 0.000 Bq	PASS/FAIL CRITERION	0.005 µCi 185 Bq
SOURCE PASSES TEST		ACTION LEVEL	0.001 µCi 37 Bq
ANALYST	Jerry Wiza	<i>Jerry P. Wiza</i>	
NOTES:	[] [BRACHYTHERAPY SEED] []		



STATE OF WISCONSIN RADIOACTIVE MATERIALS LICENSE 071-1234-01

SEALED SOURCE LEAK TEST CERTIFICATE			
RAM ACCESSION NO.		63463	
GENERAL CERTIFICATE			
LOCATION		- SOUTH BEND	
CONTACT PERSON	DANIEL ARCHAMBEAULT	TELEPHONE	574-647-7956
MEMORIAL HOSPITAL OF SOUTH BEND 615 N. MICHIGAN ST SOUTH BEND, IN 46601 U.S.A.			
LEAK TEST ANALYSIS			
SOURCE MODEL	6503	DEVICE/TOOL NUMBER	
SOURCE SERIAL NO.	2306	MANUFACTURER S/N	
ISOTOPE	CS-137	SOURCE ORIGINAL ACTIVITY	29.8000 mCi 1.1026 GBq
DATE SOURCE WIPED	08 Sep 2008	REASON FOR TEST	DISPOSAL
ANALYSIS DATE	09 Sep 2008	ANALYTICAL METHOD	Liquid Scintillation Counting
RAW SAMPLE COUNT	26.7589 cpm	INSTRUMENT	Beckman LS 6500 706-9054
BACKGROUND	37.00000 cpm	COUNTING EFFICIENCY	95.00%
NET SAMPLE COUNT	-10.2411 cpm	MINIMUM DETECTABLE ACTIVITY	1.48E-05 µCi 0.55 Bq
SAMPLE ANALYSIS ACTIVITY	0.000 µCi 0.000 Bq	PASS/FAIL CRITERION	0.005 µCi 185 Bq
SOURCE PASSES TEST		ACTION LEVEL	0.001 µCi 37 Bq
ANALYST	Jerry Wiza	<i>Jerry P. Wiza</i>	
NOTES:	[] [BRACHYTHERAPY SEED] []		



STATE OF WISCONSIN RADIOACTIVE MATERIALS LICENSE 071-1234-01

SEALED SOURCE LEAK TEST CERTIFICATE			
RAM ACCESSION NO.		63464	
GENERAL CERTIFICATE			
LOCATION		- SOUTH BEND	
CONTACT PERSON	DANIEL ARCHAMBEAULT	TELEPHONE	574-647-7956
MEMORIAL HOSPITAL OF SOUTH BEND 615 N. MICHIGAN ST SOUTH BEND, IN 46601 U.S.A.			
LEAK TEST ANALYSIS			
SOURCE MODEL	6504	DEVICE/TOOL NUMBER	
SOURCE SERIAL NO.	990	MANUFACTURER S/N	
ISOTOPE	CS-137	SOURCE ORIGINAL ACTIVITY	39.7000 mCi 1.4689 GBq
DATE SOURCE WIPED	08 Sep 2008	REASON FOR TEST	DISPOSAL
ANALYSIS DATE	09 Sep 2008	ANALYTICAL METHOD	Liquid Scintillation Counting
RAW SAMPLE COUNT	29.8423 cpm	INSTRUMENT	Beckman LS 6500 706-9054
BACKGROUND	37.00000 cpm	COUNTING EFFICIENCY	95.00%
NET SAMPLE COUNT	-7.15768 cpm	MINIMUM DETECTABLE ACTIVITY	1.48E-05 µCi 0.55 Bq
SAMPLE ANALYSIS ACTIVITY	0.000 µCi 0.000 Bq	PASS/FAIL CRITERION	0.005 µCi 185 Bq
SOURCE PASSES TEST		ACTION LEVEL	0.001 µCi 37 Bq
ANALYST	Jerry Wiza		
NOTES:	[] [BRACHYTHERAPY SEED] []		



STATE OF WISCONSIN RADIOACTIVE MATERIALS LICENSE 071-1234-01

SEALED SOURCE LEAK TEST CERTIFICATE			
RAM ACCESSION NO.		63465	
GENERAL CERTIFICATE			
LOCATION		- SOUTH BEND	
CONTACT PERSON	DANIEL ARCHAMBEAULT	TELEPHONE	574-647-7956
MEMORIAL HOSPITAL OF SOUTH BEND 615 N. MICHIGAN ST SOUTH BEND, IN 46601 U.S.A.			
LEAK TEST ANALYSIS			
SOURCE MODEL	6504	DEVICE/TOOL NUMBER	
SOURCE SERIAL NO.	978	MANUFACTURER S/N	
ISOTOPE	CS-137	SOURCE ORIGINAL ACTIVITY	38.6000 mCi 1.4282 GBq
DATE SOURCE WIPED	08 Sep 2008	REASON FOR TEST	DISPOSAL
ANALYSIS DATE	09 Sep 2008	ANALYTICAL METHOD	Liquid Scintillation Counting
RAW SAMPLE COUNT	27.7613 cpm	INSTRUMENT	Beckman LS 6500 706-9054
BACKGROUND	37.00000 cpm	COUNTING EFFICIENCY	95.00%
NET SAMPLE COUNT	-9.23874 cpm	MINIMUM DETECTABLE ACTIVITY	1.48E-05 µCi 0.55 Bq
SAMPLE ANALYSIS ACTIVITY	0.000 µCi 0.000 Bq	PASS/FAIL CRITERION	0.005 µCi 185 Bq
SOURCE PASSES TEST		ACTION LEVEL	0.001 µCi 37 Bq
ANALYST	Jerry Wiza	<i>Jerry P. Wiza</i>	
NOTES:	[] [BRACHYTHERAPY SEED] []		



STATE OF WISCONSIN RADIOACTIVE MATERIALS LICENSE 071-1234-01

SEALED SOURCE LEAK TEST CERTIFICATE			
RAM ACCESSION NO.		63466	
GENERAL CERTIFICATE			
LOCATION		- SOUTH BEND	
CONTACT PERSON	DANIEL ARCHAMBEAULT	TELEPHONE	574-647-7956
MEMORIAL HOSPITAL OF SOUTH BEND 615 N. MICHIGAN ST SOUTH BEND, IN 46601 U.S.A.			
LEAK TEST ANALYSIS			
SOURCE MODEL	6504	DEVICE/TOOL NUMBER	
SOURCE SERIAL NO.	987	MANUFACTURER S/N	
ISOTOPE	CS-137	SOURCE ORIGINAL ACTIVITY	38.7000 mCi 1.4319 GBq
DATE SOURCE WIPED	08 Sep 2008	REASON FOR TEST	DISPOSAL
ANALYSIS DATE	09 Sep 2008	ANALYTICAL METHOD	Liquid Scintillation Counting
RAW SAMPLE COUNT	29.8055 cpm	INSTRUMENT	Beckman LS 6500 706-9054
BACKGROUND	37.00000 cpm	COUNTING EFFICIENCY	95.00%
NET SAMPLE COUNT	-7.19453 cpm	MINIMUM DETECTABLE ACTIVITY	1.48E-05 µCi 0.55 Bq
SAMPLE ANALYSIS ACTIVITY	0.000 µCi 0.000 Bq	PASS/FAIL CRITERION	0.005 µCi 185 Bq
SOURCE PASSES TEST		ACTION LEVEL	0.001 µCi 37 Bq
ANALYST	Jerry Wiza	<i>Jerry P. Wiza</i>	
NOTES:	[] [BRACHYTHERAPY SEED] []		



STATE OF WISCONSIN RADIOACTIVE MATERIALS LICENSE 071-1234-01

SEALED SOURCE LEAK TEST CERTIFICATE			
RAM ACCESSION NO.		63467	
GENERAL CERTIFICATE			
LOCATION		- SOUTH BEND	
CONTACT PERSON	DANIEL ARCHAMBEAULT	TELEPHONE	574-647-7956
MEMORIAL HOSPITAL OF SOUTH BEND 615 N. MICHIGAN ST SOUTH BEND, IN 46601 U.S.A.			
LEAK TEST ANALYSIS			
SOURCE MODEL	6504	DEVICE/TOOL NUMBER	
SOURCE SERIAL NO.	991	MANUFACTURER S/N	
ISOTOPE	CS-137	SOURCE ORIGINAL ACTIVITY	38.7000 mCi 1.4319 GBq
DATE SOURCE WIPED	08 Sep 2008	REASON FOR TEST	DISPOSAL
ANALYSIS DATE	09 Sep 2008	ANALYTICAL METHOD	Liquid Scintillation Counting
RAW SAMPLE COUNT	28.7996 cpm	INSTRUMENT	Beckman LS 6500 706-9054
BACKGROUND	37.00000 cpm	COUNTING EFFICIENCY	95.00%
NET SAMPLE COUNT	-8.20042 cpm	MINIMUM DETECTABLE ACTIVITY	1.48E-05 µCi 0.55 Bq
SAMPLE ANALYSIS ACTIVITY	0.000 µCi 0.000 Bq	PASS/FAIL CRITERION	0.005 µCi 185 Bq
SOURCE PASSES TEST		ACTION LEVEL	0.001 µCi 37 Bq
ANALYST	Jerry Wiza	<i>Jerry P. Wiza</i>	
NOTES:	[] [BRACHYTHERAPY SEED] []		

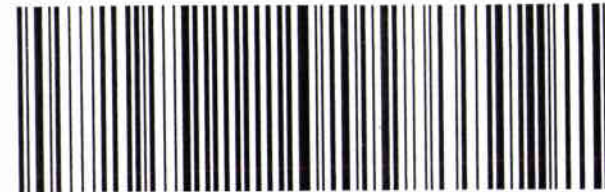
Do not ship liquids, blood or diagnostics in this packaging.

FRI - 05 FEB A1
PRIORITY OVERNIGHT

60532
IL-US
ORD

FedEx
TRK# 0215 8718 2009 6336

NZ ENLA



Emp# 115772 04FEB10 SBNA



For FedEx Express

27
200

FedEx Express
FZ
FedEx Tracking Number 8718 2009 6336

1 From This portion can be removed for Recipient's records.
 Date 2/4/10 FedEx Tracking Number 871820096336
 Sender's Name Dan Archambeault Phone 574 647-7946
 Company ME MTRIAL HOSPITAL
 Address 815 N MICHIGAN ST # C ROC
 City SOUTH BEND State IN ZIP 46801-1087

2 Your Internal Billing Reference

3 To Recipient's Name Colleen Carol Casey Phone 630 829-9841
 Company U.S. N.R.C.
 Address 2443 Warrenville Rd #210
 City Lisle State IL ZIP 60532-4352

HOLD Weekday
 FedEx location address
 REQUIRED. NOT available for
 FedEx First Overnight.

HOLD Saturday
 FedEx location address
 REQUIRED. Available ONLY for
 FedEx Priority Overnight and
 FedEx 2Day to select locations.

4a Express Package Service * To most locations. Packages up to 150 lbs.

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. *

FedEx 2Day
 Second business day. * Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx Express Saver
 Next business afternoon. * Saturday Delivery NOT available.

4b Express Freight Service ** To most locations. Packages over 150 lbs.

FedEx 1Day Freight
 Next business day. ** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected. FedEx 1Day Freight Booking No.

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.

5 Packaging * Declared value limit \$500.

FedEx Envelope * FedEx Pak *
 Includes FedEx Small Pak and FedEx Large Pak.

FedEx Box FedEx Tube Other

6 Special Handling and Delivery Signature Options

SATURDAY Delivery
 NOT available for FedEx Standard Overnight, FedEx Express Saver, or FedEx 3D by Freight.

No Signature Required
 Package may be left without obtaining a signature for delivery.

Direct Signature
 Someone at recipient's address may sign for delivery. **Fee applies.**

Indirect Signature
 If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. **Fee applies.**

Does this shipment contain dangerous goods?
 One box must be checked.

No Yes As per attached Shipper's Declaration. Yes Shipper's Declaration not required. Dry Ice Dry Ice, 3, UN 1845 _____ x _____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box. Cargo Aircraft Only

7 Payment Bill to:

Sender's Acct. No. in Section 1 will be billed. Recipient Third Party Credit Card Cash/Check

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No.

Total Packages Total Weight Credit Card Acct.

fedex.com 1800.GoFedEx 1800.463.3339

RECIPIENT: PEEL HERE

fedex.com 1800.GoFedEx 1800.463.3339

