Boone Hospital Center

1600 East Broadway
Columbia, Missouri 65201
Phone: 573-815-8000

August 1, 2007

US Nuclear Regulatory Commission
Materials Licensing Section
2443 Warrenville Road Suite 210
Lisle, IL 60532-4352

License Number: 24-01565-01
Request to Authorize Release of "old" Nuclear Medicine Department
Mail Control # 315988

Dear Mr. Reichhold,

The move of our Nuclear Medicine Department to a newly constructed addition to Boone Hospital is complete. Following the move of equipment and sources to the new department, I performed a comprehensive survey of the "old" Hot Lab and Storage Room. Exposure rate measurements were performed to show that all sources of radioactive material were removed. Wipe tests of the floors & counter-tops were also performed to detect any contamination. Radiation levels in the "old" Hot Lab and Storage Room were at or below background levels and wipe counts revealed no removable contamination on any surface.

A wipe test was performed on every sealed source , including those in storage, after being transferred. All wipe counts were below limits specified by the NRC.

Close-out surveys are attached for your review. Please contact me if any additional information is needed in order to release our "old" facility for unrestricted use.

Enclosures:

Diagram of "old" Hot Lab
Diagram of "old" Storage Room
Exposure Rate Measurements for "old" Hot Lab & Storage Room
Wipe Test Data Sheet for "old" Hot Lab & Storage Room
Wipe Test Results for "old" Hot Lab & Storage Room
Wipe/Well Counter Identification, Settings, and Calibration Data
Inventory of all Sealed Sources in our possession
Wipe Test Data Sheet for Sealed Sources (in use)
Wipe Test Results for Sealed Sources (in use)
Wipe Test Data Sheet for Sealed Sources (in Storage- not in use)
Wipe Test Results for Sealed Sources (in Storage- not in use)

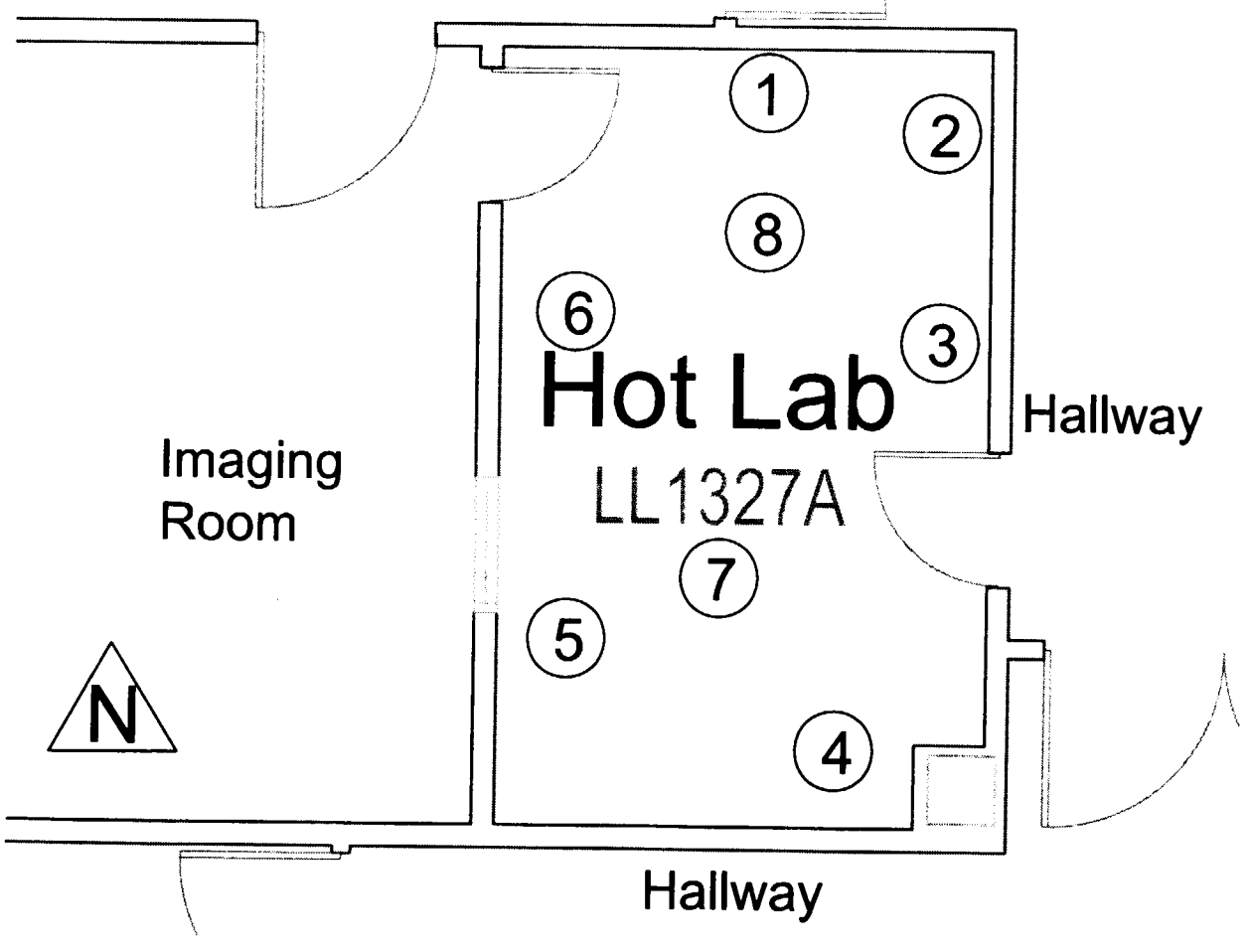
RECEIVED AUG 0 7 2007

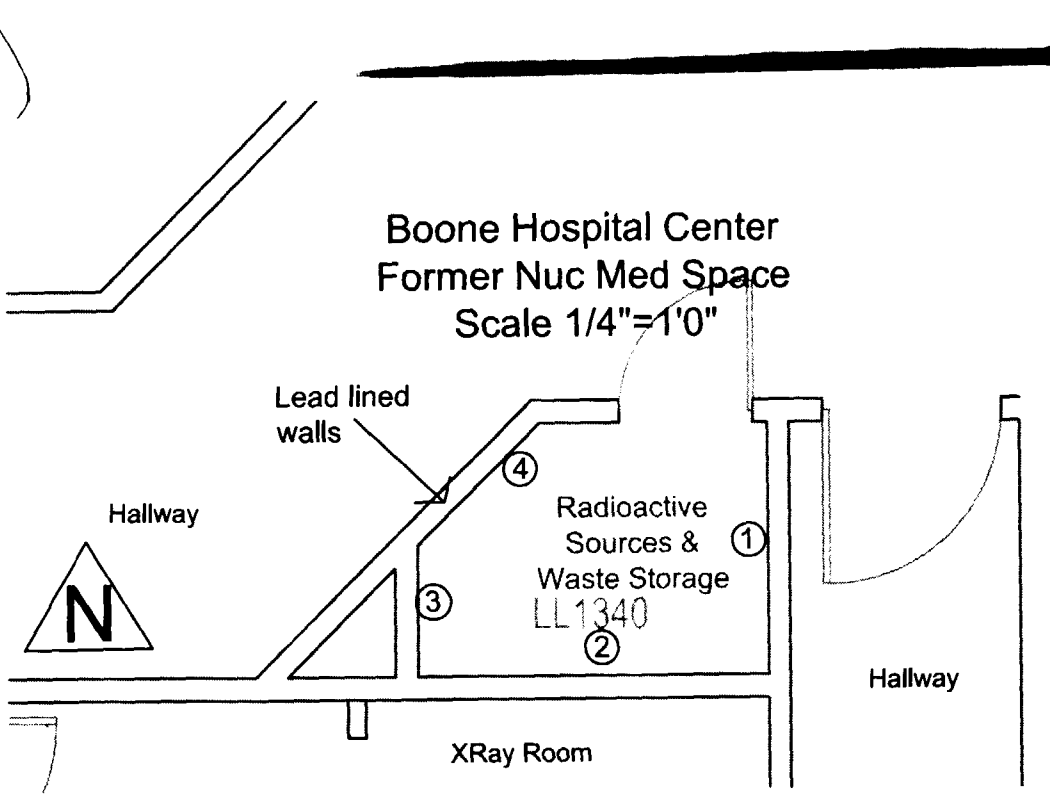
Sincere Thanks, Liesje Myers

Liesje Myers, CNMT
Radiation Safety Officer

BJC HealthCare

Boone Hospital Center
Former Nuc Med Space
Scale 1/4"=1'0"




Boone Hospital Center
Former Nuc Med Space
Scale 1/4"=1'0"
Lead lined walls
Hallway
N
Radioactive Sources & Waste Storage
LL1340
1
2
3
4
XRay Room
Hallway

CLOSE-OUT SURVEY

Boone Hospital
Nuclear Medicine Department ("old" facility)
1600 East Broadway
Columbia, Missouri 65201

Exposure Rate Measurements - Hot Lab (Room LL1327A)

Location Surveyed (See diagram)	Radiation Levels at 1 meter from surface
1	.00003 mSv/hr
2	.00003 mSv/hr
3	.00004 mSv/hr
4	.00002 mSv/hr
5	.00003 mSv/hr
6	.00004 mSv/hr
7	.00003 mSv/hr
8	.00002 mSv/hr
Background	.00004 mSv/hr

Results: All areas surveyed were at or below background radiation level

Exposure Rate Measurements - Radioactive Waste Storage Room (Room LL1340)

Location Surveyed (See diagram)	Radiation Levels at 1 meter from surface
1	.00002 mSv/hr
2	.00002 mSv/hr
3	.00003 mSv/hr
4	.00002 mSv/hr
Background	.00003 mSv/hr

Results: All areas surveyed were at or below background radiation level

Name of Individual Performing Surveys	Liesje Myers, Radiation Safety Officer
Date survey was performed	June 6, 2007 (Hot Lab) June 19, 2007 (Storage Room)
Survey Meter used for measurements	Ludlum GM Model 3 (SN# 163350)
Date of survey meter calibration	February 13, 2007

Wipe Test Data Sheet

Date: Hot Lab 6/6/07
Storage Room 6/19/07

Removable Contamination Check - Hot Lab (Room LL1327A)

6/6/2007

Bkgrd wipe = 109 cpm

Area Wiped	Description	Wipe Count cpm per 100 square cm
1	Area where injections given	102
2	Hood	111
3	Sink / Counter top	140
4	Counter Top, Xe^{133} storage	129
5	L-block, doses kept here	108
6	counter top	147
7	Floor (South end)	157
8	Floor (North end)	114

Removable Contamination Check - Radioactive Waste Storage Room (Room LL1340)

6/19/07

Bkg wipe = 109

Area Wiped	Description	Wipe Count cpm per 100 square cm
1	East - floor & shelving	113
2	South - floor & shelving	108
3	West - floor	105
4	North - floor & shelving	127

Technologist performing wipe tests Susie Myers

CLOSE-OUT SURVEY (continued)

Boone Hospital
Nuclear Medicine Department ("old" facility)
1600 East Broadway
Columbia, Missouri 65201

Removable Contamination Check - Hot Lab (Room LL1327A)

Location Wiped (See diagram)	**Bkgd** (cpm)	**Wipe*** (cpm)	**Net** (cpm)	**Corrected Net** (dpm)	**Activity** (microcuries)
1	109	102	< bkgd	< bkgd	< bkgd
2	109	111	2	6	.0000027
3	109	140	31	93	.0000419
4	109	129	20	60	.0000270
5	109	108	< bkgd	< bkgd	< bkgd
6	109	147	38	114	.0000514
7	109	157	48	144	.0000649
8	109	114	5	15	.0000068

*Note: All wipes are per 100 square centimeters of surface area wiped
Results: All wipe counts were below limits specified in NRC Decontamination Guide

Removable Contamination Check - Radioactive Waste Storage Room (Room LL1340)

Location Wiped (See diagram)	**Bkgd** (cpm)	**Wipe*** (cpm)	**Net** (cpm)	**Corrected Net** (dpm)	**Activity** (microcuries)
1	109	113	4	12	.0000054
2	109	102	< bkgd	< bkgd	< bkgd
3	109	105	< bkgd	< bkgd	< bkgd
4	109	127	18	54	.0000243

*Note : All wipes are per 100 square centimeters of surface area wiped
Results: All wipe counts were below limits specified in NRC Decontamination Guide

Wipe/Well Counter Identification & Settings

Detector:	Capintec Scintillation Well Counter
Model	CAPRAC
Serial Number	1798
Window Setting	open

WipeWell Counter Calibration Data (performed June 5, 2007)

Source Description	Serial #	Calibration Date	Calibration Activity(uCi)	Current Activity(uCi)	Current Activity (dpm)	Bkgrd (cpm)	Counts (cpm)	Net (cpm)
Cs-137 rod	3411 MR	12/1/1989	0.1	0.066731	148143	109	49630	49521

$$\textbf{Well Counter Efficiency} = \frac{\text{net cpm}}{\text{calculated dpm}} = \frac{49521}{148143} = \textbf{33.4 \%}$$

Name of Individual Performing Wipe Tests	Liesje Myers, Radiation Safety Officer
Date wipes were performed	June 6, 2007 (Hot Lab) June 19, 2007 (Storage Room)

Boone Hospital Nuclear Medicine Department
Columbia, Missouri 65201

Quarterly Inventory of Sealed Sources

Date of Inventory: June 5, 2007 (Sources moved to new department)
June 18, 2007 (Storage /Waste Room moved)

Nuclide	Type	Location	Assay Activity	Assay Date	Manufacturer	Serial #	Model	Tech
Cs-137	AllegroTransmission Source	Allegro PET	20.00 mCi	01-Apr-03	Isotope Production Lab	CZ-519	HEG-0111	Lm 6/5
Ba-133	Sealed QC Vial	Hot Lab	278.00 uCi	31-Jan-89	Dupont	NES-358	S358006-020	Lm 6/5
Co-57	Marker/Ruler	Hot Lab	160.00 uCi	01-Aug-05	Isotope Pro. Lab	1140-11	N/A	Lm 6/5
Co-57	Uniformity Flood Source	Hot Lab	20.00 mCi	02-Nov-05	North American Scientific	67670	MED 3709	Lm 6/5
Co-60	Sealed QC Vial	Hot Lab	56.06 uCi	01-Jan-83	Amersham	CTR. 560	5068MA	Lm 6/5
Cs-137	Sealed QC Vial	Hot Lab	267.40 uCi	01-Jan-83	Amersham	CTR. 562	3304MA	Lm 6/5
Eu-152	Button Marker	Hot Lab	0.50 uCi	01-Jan-76	Mallinckrodt	NONE	4KG	Lm 6/5
Na-22	Allegro PET QC Source	Hot Lab	100.00 uCi	01-Nov-05	Isotope Pro. Lab	1104-93-7	GF-0227	Lm 6/5
Ra-226	Sealed Aluminum Tube	Hot Lab	4.70 uCi	01-Jan-85	Unknown	NONE	NONE	Lm 6/5
Cs-137	Button Sealed Source	Ludlum Area Monitor	1.00 uCi	01-Apr-06	The Source	227042		Lm 6/5
Cs-137	Button Sealed Source	Ludlum GM Meter	1.00 uCi	01-May-97	The Source	10501	1462	Lm 6/5
Cs-137	Button Sealed Source	Ludlum GM Meter	1.00 uCi	01-Jan-95	The Source	99-2411		Lm 6/5

Boone Hospital Nuclear Medicine Department
Columbia, Missouri 65201

Quarterly Inventory of Sealed Sources

Date of Inventory: June 5, 2007 Moved to new department
June 18, 2007 - (Storage/waste Room moved)

Nuclide	Type	Location	Assay Activity	Assay Date	Manufacturer	Serial #	Model	Tech
Co-57	Sealed Rod	Probe/Well Counter	1.00 uCi	01-Dec-05	Isotope Products Lab	1140-80	GF-0207	Lm 6/5
Cs-137	Sealed Rod	Probe/Well Counter	0.10 uCi	01-Dec-89	Amersham	CS1376-33401	3411MR	Lm 6/5
* Co-57	Button Marker	Sealed Box - Waste Storage	50.00 uCi		N/A	1 ✓	23-113TX	6/18 Lm
* Co-57	Button Marker	Sealed Box - Waste Storage	50.00 uCi		N/A	2 ✓	23-113TX	6/18 Lm
* Co-57	Button Marker	Sealed Box - Waste Storage	50.00 uCi	01-Dec-84	New England Nuclear	NES-289 ✓	2891284A	6/18 Lm
* Co-57	Line Source In Lead Foil	Sealed Box - Waste Storage	372.00 uCi	11-Sep-84	Victoreen	1001 ✓	67-231	6/18 Lm
* Co-57	Sealed QC Vial	Sealed Box - Waste Storage	5.50 mCi	01-Mar-88	Amersham	7634MA ✓	CTCV1	6/18 Lm
* Co-57	Sealed QC Vial	Sealed Box - Waste Storage	3.60 mCi	01-Dec-82	Amersham	CTR. 566 ✓	4579MA	6/18 Lm
* Co-57	Sealed QC Vial	Sealed Box - Waste Storage	0.86 mCi	23-Aug-77	Capintec	NONE ✓	319-033-20	6/18 Lm
* Co-57	Sealed QC Vial	Sealed Box - Waste Storage	6.09 mCi	01-Apr-94	CIS	503/2822 ✓	EGAG90	6/18 Lm
* Co-57	Sealed QC Vial	Sealed Box - Waste Storage	5.86 mCi	22-Feb-91	CIS	184/1642 ✓	EGAG90	6/18 Lm
* Co-57	Sealed QC Vial	Sealed Box - Waste Storage	3.17 mCi	05-May-86	Syncor	736/106 ✓	2I2001	6/18 Lm

Boone Hospital Nuclear Medicine Department
Columbia, Missouri 65201

Quarterly Inventory of Sealed Sources

Date of Inventory: June 5, 2007 - moved to new department
June 18, 2007 (Storage Room moved)

Nuclide	Type	Location	Assay Activity	Assay Date	Manufacturer	Serial #	Model	Tech
* Co-57	Sealed Rod	Sealed Box - Waste Storage	0.10 uCi	01-Dec-89	Amersham	BV431	5429MR	6/18 [illegible]
* Co-57	Sealed Rod	Sealed Box - Waste Storage	0.10 uCi	01-Dec-97	Isotope Production Lab	583-26	GF-057	6/18 [illegible]
* Co-57	Sealed Rod	Sealed Box - Waste Storage	0.11 uCi	12-Jan-96	Unknown	EV444	CTR.R1	6/18 [illegible]
* Co-57	Sealed Rod	Sealed Box - Waste Storage	0.11 uCi	05-Apr-94	Unknown	BY731	CTR.R2	6/18 [illegible]
* Co-57	Telescoping Pointer	Sealed Box - Waste Storage	50.00 uCi	01-May-80	N/A	NONE	2600580A	6/18 [illegible]
* Co-60	Sealed QC Vial	Sealed Box - Waste Storage	96.00 uCi	23-Aug-77	Capintec	NONE	294-281-10	6/18 [illegible]
* Cs-137	25 Cc Glass Vial W/Liquid	Sealed Box - Waste Storage	11.50 uCi	01-Sep-72	Squibb	NONE	CS137AS	6/18 [illegible]
* Cs-137	Sealed QC Vial	Sealed Box - Waste Storage	102.00 uCi	23-Aug-77	Capintec	NONE	319-074-43	6/18 [illegible]
* Cs-137	Sealed Rod	Sealed Box - Waste Storage	0.10 uCi		Amersham	NONE	3059MT	6/18 [illegible]
* Cs-137	Sealed Rod	Sealed Box - Waste Storage	29.00 uCi	13-May-75	Ohio Nuclear	NONE	95	6/18 [illegible]
* Cs-137	Sealed Rod	Sealed Box - Waste Storage	1.00 uCi	Unknown	Picker	N/A	N/A	6/18 [illegible]
Ba-133	Sealed Rod	Storage Room	0.10 uCi	01-Dec-89	Amersham	BA1334-33401	2185MR	6/18 [illegible]

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Quarterly Inventory of Sealed Sources

Date of Inventory: June 5, 2007 Moved to New Department
June 18, 2007 (Storage Room moved)

Nuclide	Type	Location	Assay Activity	Assay Date	Manufacturer	Serial #	Model	Tech
Co-57	Sealed QC Vial	Storage Room	4.91 mCi	01-Dec-97	Isotope Production Lab	584-10	RV-057	6/18 fm
Co-57	Sealed Rod	Storage Room	0.11 uCi	01-Sep-03	Isotope Products Lab	962-81-2	GF-0207	6/18 fm
Co-57	Sealed Rod	Storage Room	0.11 uCi	01-Sep-99	North American Scientific	BO996	MED3400	6/18 fm
Co-57	Uniformity Flood Source	Storage Room	20.77 mCi	02-Oct-96	Amersham	2423MQ	CTR701	6/18 fm
Co-57	Uniformity Flood Source	Storage Room	5.00 mCi	15-Apr-82	Dupont	NES-391	3190482f-01	6/18 fm
Co-57	Uniformity Flood Source	Storage Room	20.00 mCi	19-Dec-97	North American Scientific	A7610	MED3702	6/18 fm
Cs-137	CPET - Transmission	Storage Room	5.00 mCi	15-Feb-00	Isotope Production Lab	303/97	HEG-0096	6/18 fm
Cs-137	MCD/AC	Storage Room	30.00 mCi	01-Aug-98	Isotope Production Lab	BC-779	HEG-0088	6/18 fm
Cs-137	MCD/AC	Storage Room	30.00 mCi	01-Aug-98	Isotope Production Lab	BC-778	HEG-0088	6/18 fm
Cs-137	Sealed Brachy. Seed	Storage Room	26.50 mCi	12-Dec-89	3M	07658	6501	6/18 fm
Cs-137	Sealed Brachy. Seed	Storage Room	26.25 mCi	12-Dec-89	3M	07650	6501	6/18 fm
Cs-137	Sealed Brachy. Seed	Storage Room	26.50 mCi	12-Dec-89	3M	07642	6501	6/18 fm

Boone Hospital Nuclear Medicine Department
Columbia, Missouri 65201

Quarterly Inventory of Sealed Sources

Date of Inventory: June 5, 2007 - Move to new department
June 18, 2007 (Storage Room moved)

Nuclide	Type	Location	Assay Activity	Assay Date	Manufacturer	Serial #	Model	Tech
Cs-137	Sealed Brachy. Seed	Storage Room	26.75 mCi	12-Dec-89	3M	07647	6501	6/18 fm
Cs-137	Sealed Brachy. Seed	Storage Room	53.25 mCi	12-Dec-89	3M	04124	6503	6/18 fm
Cs-137	Sealed Brachy. Seed	Storage Room	26.50 mCi	12-Dec-89	3M	07637	6501	6/18 fm
Cs-137	Sealed Brachy. Seed	Storage Room	38.75 mCi	12-Dec-89	3M	05463	6502	6/18 fm
Cs-137	Sealed Brachy. Seed	Storage Room	53.25 mCi	12-Dec-89	3M	04136	6503	6/18 fm
Cs-137	Sealed Brachy. Seed	Storage Room	38.50 mCi	12-Dec-89	3M	05479	6502	6/18 fm
Cs-137	Sealed Brachy. Seed	Storage Room	38.50 mCi	12-Dec-89	3M	05474	6502	6/18 fm
Cs-137	Sealed Brachy. Seed	Storage Room	26.75 mCi	12-Dec-89	3M	07659	6501	6/18 fm
Cs-137	Sealed Brachy. Seed	Storage Room	38.50 mCi	12-Dec-89	3M	05462	6502	6/18 fm
Cs-137	Sealed Brachy. Seed	Storage Room	38.25 mCi	29-Dec-79	Nuclear Associates	G9	67-802	6/18 fm
Cs-137	Sealed Brachy. Seed	Storage Room	53.00 mCi	29-Dec-79	Nuclear Associates	P0	67-802	6/18 fm
Cs-137	Sealed Brachy. Seed	Storage Room	39.50 mCi	29-Dec-79	Nuclear Associates	L1	67-802	6/18 fm

Boone Hospital Nuclear Medicine Department
Columbia, Missouri 65201

Quarterly Inventory of Sealed Sources

Date of Inventory: June 5. 2007 Moved to New Department
June 18. 2007 (Storage Room moved)

Nuclide	Type	Location	Assay Activity	Assay Date	Manufacturer	Serial #	Model	Tech
Cs-137	Sealed Brachy. Seed	Storage Room	39.00 mCi	29-Dec-79	Nuclear Associates	K9	67-802	6/18 [illegible]
Cs-137	Sealed Brachy. Seed	Storage Room	26.75 mCi	29-Dec-79	Nuclear Associates	J0	67-802	6/18 [illegible]
Cs-137	Sealed Brachy. Seed	Storage Room	39.25 mCi	29-Dec-79	Nuclear Associates	L0	67-802	6/18 [illegible]
Cs-137	Sealed Brachy. Seed	Storage Room	25.50 mCi	29-Dec-79	Nuclear Associates	G3	67-802	6/18 [illegible]
Cs-137	Sealed Brachy. Seed	Storage Room	26.00 mCi	29-Dec-79	Nuclear Associates	J4	67-802	6/18 [illegible]
Cs-137	Sealed Brachy. Seed	Storage Room	26.50 mCi	29-Dec-79	Nuclear Associates	H6	67-802	6/18 [illegible]
Cs-137	Sealed Brachy. Seed	Storage Room	53.00 mCi	29-Dec-79	Nuclear Associates	P1	67-802	6/18 [illegible]
Cs-137	Sealed Brachy. Seed	Storage Room	54.75 mCi	29-Dec-79	Nuclear Associates	P8	67-802	6/18 [illegible]
Cs-137	Sealed Brachy. Seed	Storage Room	52.00 mCi	29-Dec-79	Nuclear Associates	P2	67-802	6/18 [illegible]
Cs-137	Sealed Brachy. Wire	Storage Room	25.00 mCi	08-Nov-79	Nuclear Associates	G1-48C	67-601	6/18 [illegible]
Cs-137	Sealed Brachy. Wire	Storage Room	25.75 mCi	08-Nov-79	Nuclear Associates	G1-49C	67-601	6/18 [illegible]
Cs-137	Sealed Brachy. Wire	Storage Room	24.75 mCi	08-Nov-79	Nuclear Associates	G1-46C	67-601	6/18 [illegible]

Boone Hospital Nuclear Medicine Department
Columbia, Missouri 65201

Quarterly Inventory of Sealed Sources

Date of Inventory: June 5, 2007 Moved to new department
June 18, 2007 (Storage Room moved)

Nuclide	Type	Location	Assay Activity	Assay Date	Manufacturer	Serial #	Model	Tech
Cs-137	Sealed Brachy. Wire	Storage Room	24.75 mCi	08-Nov-79	Nuclear Associates	G1-44C	67-601	6/18 fm
Cs-137	Sealed Brachy. Wire	Storage Room	24.75 mCi	08-Nov-79	Nuclear Associates	G1-51C	67-601	6/18 fm
Cs-137	Sealed Brachy. Wire	Storage Room	25.25 mCi	08-Nov-79	Nuclear Associates	G1-53C	67-601	6/18 fm
Cs-137	Sealed Brachy. Wire	Storage Room	25.75 mCi	08-Nov-79	Nuclear Associates	G1-45C	67-601	6/18 fm
Cs-137	Sealed Brachy. Wire	Storage Room	25.75 mCi	08-Nov-79	Nuclear Associates	G1-47C	67-601	6/18 fm
Cs-137	Sealed Brachy. Wire	Storage Room	24.50 mCi	08-Nov-79	Nuclear Associates	G1-50C	67-601	6/18 fm
Cs-137	Sealed Brachy. Wire	Storage Room	25.75 mCi	08-Nov-79	Nuclear Associates	G1-52C	67-601	6/18 fm
Cs-137	Survey Meter Cal. Source	Storage Room	142.50 mCi	18-Feb-91	Tech Ops	S-754	77302	6/18 fm
Gd-153	Bone Density Source	Storage Room	1000.00 mCi	09-Mar-90	Amersham	2373LN	GDCCYI-2	6/18 fm
Gd-153	Bone Density Source	Storage Room	1000.00 mCi	28-Nov-91	Amersham	2945LN	GDCCYI-1	6/18 fm
Ge-68	Sealed Aluminum Rod	Storage Room	430.00 uCi	06-Jan-97	CTI, Inc	821	LS-0.5	6/18 fm
Ge-68	Sealed Aluminum Rod	Storage Room	690.00 uCi	01-Sep-98	CTI, Inc	1251	LS-0.5	6/18 fm

Boone Hospital Nuclear Medicine Department
Columbia, Missouri 65201

Quarterly Inventory of Sealed Sources

Date of Inventory: June 5, 2007 Moved to new department
Storage Room moved - June 18, 2007

Nuclide	Type	Location	Assay Activity	Assay Date	Manufacturer	Serial #	Model	Tech
Na-22	Allegro PET QC Source	Storage Room	100.00 uCi	01-Apr-03	Isotope Production Lab	915-48-30	GF-0227	6/18 [illegible]
Na-22	Allegro PET QC Source	Storage Room	100.00 uCi	12-Jan-99	Isotope Production Lab	681-59-3	GF-0227	6/18 [illegible]
Sr-90	Sealed Applicator	Storage Room	60.00 mCi	01-Oct-69	Tracer Lab	NONE	RA-1	6/18 [illegible]

* Sealed box opened for inventory. All 21 sources accounted for.
Box re-sealed by Liesje Myers on 6/18/2007.

Liesje Myers,
Radiation Safety Officer

WIPE TEST DATA SHEET 6/5/2007

All sources in Hot Lab – moved to new department

Note: Cs-137 transmission source (SN CZ-519) internal to PET scanner – not removed for wipe test. fm

CALIBRATION SOURCE:

TYPE : Cs-137
SERIAL NO.: 3411MR
CALIBRATED: 12/1/89

BKG COUNTS 109
SOURCE COUNTS 49500

SEALED SOURCES:

	TYPE	SERIAL NO.	CALIBRATED	BKG COUNTS	SOURCE COUNTS
1	Ba-133 vial	NES-358	1/31/89	123	133
2	Co-57 Marker	1140-11	8/1/05	123	111
3	Co-57 flood source	67670	11/2/05	123	120
4	Co-60 vial	CTR 560	1/1/83	123	142
5	Cs-137 vial	CTR 562	1/1/83	123	122
6	Eu-152 button	unknown	1/1/76	123	108
7	Na^{22} PET qc	1104-93-7	11/1/05	123	142
8	Ra^{226} Tube	unknown	1/1/85	123	105
9	Cs-137 button	227042	4/1/06	123	126
10	Cs-137 button	10501	5/1/97	123	129
11	Cs-137 button	99-2411	1/1/95	123	133
12	Co-57 Rod	1140-80	12/1/05	123	111
13	Cs-137 Rod	CS1376-33401	12/1/89	123	121
14					
15					

*** IMPORTANT *** *THOSE LEAK TESTS WHICH ARE ABOVE THE 0.005 uCi THRESHOLD MUST BE REMOVED FROM USE!!!*

BOONE HOSPITAL CENTER
COLUMBIA, MISSOURI 65201

SEMI-ANNUAL WIPE TEST for
REMOVEABLE RADIOACTIVE CONTAMINATION from
NUCLEAR MEDICINE CALIBRATION CHECK SOURCES and BRACHYTHERAPY SOURCES

Date : 05-Jun-07

DETECTOR IDENTIFICATION, SETTINGS, AND CALIBRATION DATA:

Detector : CAPINTEC CAPRAC
SCINTILLATION WELL

Model Number CAPRAC
Serial Number : 1798
Window Setting open

ANALYZER CALIBRATION SOURCE DATA:

TYPE	SOURCE DESCRIPTION	CALIBRATION DATE	CALIBRATION ACTIVITY (in uCi)	CURRENT ACTIVITY (in uCi)	SERIAL NUMBER	BKG (cpm)	COUNTS (cpm)	NET (cpm)	COUNTING EFFICIENCY
Cs-137	Sealed Rod	01-Dec-89	0.1000000	0.066939131	CS1376-3340'	109	49500	49391	33.24%

SEALED SOURCE WIPE TEST DATA:

TYPE	SOURCE DESCRIPTION	CALIBRATION DATE	CALIBRATION ACTIVITY	CURRENT ACTIVITY	Units	SERIAL NUMBER	BKG (cpm)	WIPES (cpm)	NET (cpm)	CORRECTED NET (dpm)	CORRECTED ACTIVITY (in uCi)	THRESHOLD 0.005 uCi
Cs-137	AllegroTransmission Source	04/01/03	20	18.1733	mCi	CZ-519	Internal to the PET Scanner			Can NOT be removed for wiping		
Ba-133	Sealed QC Vial	01/31/89	278	83.0530	uCi	NES-358	123	133	10	30	0.00001	BELOW THRESHOLD
Co-57	Marker/Ruler	08/01/05	160	28.6999	uCi	1140-11	123	111	0	0	0.00000	BELOW THRESHOLD
Co-57	Uniformity Flood Source	11/02/05	20	4.5490	mCi	67670	123	120	0	0	0.00000	BELOW THRESHOLD
Co-60	Sealed QC Vial	01/01/83	56.06	2.2587	uCi	CTR. 560	123	142	19	57	0.00003	BELOW THRESHOLD
Cs-137	Sealed QC Vial	01/01/83	267.4	152.7516	uCi	CTR. 562	123	122	0	0	0.00000	BELOW THRESHOLD
Eu-152	Button Marker	01/01/76	0.5	0.0817	uCi	NONE	123	105	0	0	0.00000	BELOW THRESHOLD
Na-22	Allegro PET QC Source	11/01/05	100	65.5190	uCi	1104-93-7	123	142	19	57	0.00003	BELOW THRESHOLD
Ra-226	Sealed Aluminum Tube	01/01/85	4.7	4.6547	uCi	NONE	123	105	0	0	0.00000	BELOW THRESHOLD
Cs-137	Button Sealed Source	04/01/06	1	0.9734	uCi	227042	123	126	3	9	0.00000	BELOW THRESHOLD
Cs-137	Button Sealed Source	05/01/97	1	0.7934	uCi	10501	123	129	6	18	0.00001	BELOW THRESHOLD
Cs-137	Button Sealed Source	01/01/95	1	0.7521	uCi	99-2411	123	133	10	30	0.00001	BELOW THRESHOLD
Co-57	Sealed Rod	12/01/05	0.9998	0.2449	uCi	1140-80	123	111	0	0	0.00000	BELOW THRESHOLD
Cs-137	Sealed Rod	12/01/89	0.1	0.0669	uCi	CS1376-33401	123	121	0	0	0.00000	BELOW THRESHOLD

Wipe Test(s) done by: Luize Myers Date: 6/5/07 R.S.O. Review done by: Luize Myers Date: 6/5/07

WIPE TEST DATA SHEET

6/18/2007

CALIBRATION SOURCE:

TYPE : Cs-137
SERIAL NO.: 3411MR
CALIBRATED: 12/1/89

BKG COUNTS 109
SOURCE COUNTS 49500

Sources in Waste Storage - Transferred to new Storage Room. All sources wiped. Contents of sealed box removed for inventory & wiping. Resealed by Liesje Myers 6/18/2007

SEALED SOURCES:

	TYPE	SERIAL NO.	CALIBRATED		BKG COUNTS	SOURCE COUNTS
1	Co^{57} Button	1		IN BOX	99	117
2	Co^{57} Button	2		IN BOX	99	140
3	Co^{57} Button	NES-289	12-1-84	IN BOX	99	143
4	Co^{57} line source	1001	9/11/84	IN BOX	99	159
5	Co^{57} vial	CTR.566	12/1/82	IN BOX	99	107
6	Co^{57} vial	7634MA	3/1/88	IN BOX	99	165
7	Co^{57} vial	unknown	8/23/77	IN BOX	99	117
8	Co^{57} vial	unknown	2/22/91	IN BOX	99	115
9	Co^{57} vial	503-2822	4/1/94	IN BOX	99	130
10	Co^{57} vial	736-106	5/5/86	IN BOX	99	164
11	Co^{57} Rod	BY431	12/1/89	IN BOX	99	90
12	Co^{57} Rod	583-26	12/1/97	IN BOX	99	94
13	Co^{57} Rod	EV-444	1/12/96	IN BOX	99	102
14	Co^{57} Rod	BY731	4/5/94	IN BOX	99	137
15	Co^{57} pointer	unknown	5/1/80	IN BOX	99	143

Count time = 60 sec

WIPE TEST DATASHEET

CALIBRATION SOURCE:

TYPE : Cs-137
SERIAL NO.: 3411MR
CALIBRATED: 12/1/89

BKG COUNTS _____

SOURCE COUNTS _____

SEALED SOURCES:

	TYPE	SERIAL NO.	CALIBRATED		BKG COUNTS	SOURCE COUNTS
1	Co^{60} vial	unknown	8/23/77	IN BOX	99	90
2	Cs^{137} glass vial	unknown	9/1/72	IN BOX	99	116
3	Cs^{137} vial	unknown	8/23/77	IN BOX	99	135
4	Cs^{137} rod	unknown		IN BOX	99	103
5	Cs^{137} rod	unknown	5/13/75	IN BOX	99	121
6	Cs^{137} rod	unknown	unknown	IN BOX	99	138
7	Ba^{133} rod	BA 1334-33401	12/1/89		99	107
8	Co^{57} vial	S84-10	12/1/97		99	123
9	Co^{57} rod	962-81-2	9/1/03		99	125
10	Co^{57} rod	B0996	9/1/99		99	141
11	Co^{57} flood	2423 MQ	10/2/96		99	137
12	Co^{57} flood	NES-391	4/15/82		99	116
13	Co^{57} flood	A7610	12/19/97		99	124
14	Cs^{137} CPET	303/97	2/15/00		99	149
15	Cs^{137} MCD	BC-779	8/1/98		99	116

WIPE TEST DATA SHEET

CALIBRATION SOURCE:

TYPE : Cs-137
SERIAL NO.: 3411MR
CALIBRATED: 12/1/89

BKG COUNTS _____

SOURCE COUNTS _____

SEALED SOURCES:

TYPE : Cs^{137} MCD
SERIAL NO.: BC-778
CALIBRATED: 8/1/98

1 BKG COUNTS 99
SOURCE COUNTS 120

TYPE : Ge-68
SERIAL NO.: 1251
CALIBRATED: 9/1/98

2 BKG COUNTS 99
SOURCE COUNTS 136

TYPE : Ge-68
SERIAL NO.: 821
CALIBRATED: 1/6/97

3 BKG COUNTS 99
SOURCE COUNTS 132

TYPE : Na^{22} PETQC
SERIAL NO.: 915-48-30
CALIBRATED: 4/1/03

4 BKG COUNTS 99
SOURCE COUNTS 135

TYPE : Na^{22} PETQC
SERIAL NO.: 681-59-3
CALIBRATED: 1/12/99

5 BKG COUNTS 99
SOURCE COUNTS 139

TYPE : Cs^{137} seed
SERIAL NO.: 07650 Tan
CALIBRATED: 12/12/89 Safe

6 BKG COUNTS 99
SOURCE COUNTS 123

TYPE : Cs^{137} seed
SERIAL NO.: 07637 Tan
CALIBRATED: 12/12/89 Safe

7 BKG COUNTS 99
SOURCE COUNTS 122

TYPE : Cs^{137} seed
SERIAL NO.: 05463 Tan
CALIBRATED: 12/12/89 Safe

8 BKG COUNTS 99
SOURCE COUNTS 105

TYPE : Cs^{137} seed
SERIAL NO.: 07659 Tan
CALIBRATED: 12/12/89 Safe

9 BKG COUNTS 99
SOURCE COUNTS 114

TYPE : Cs^{137} seed
SERIAL NO.: 05479 Tan
CALIBRATED: 12/12/89 Safe

10 BKG COUNTS 99
SOURCE COUNTS 104

TYPE : Cs^{137} seed
SERIAL NO.: 05474 Tan
CALIBRATED: 12/12/89 Safe

11 BKG COUNTS 99
SOURCE COUNTS 107

TYPE : Cs^{137} seed
SERIAL NO.: 04124 Tan
CALIBRATED: 12/12/89 Safe

12 BKG COUNTS 99
SOURCE COUNTS 104

TYPE : Cs^{137} seed
SERIAL NO.: 05462 Tan
CALIBRATED: 12/12/89 Safe

13 BKG COUNTS 99
SOURCE COUNTS 96

TYPE : Cs^{137} seed
SERIAL NO.: 07658 Tan
CALIBRATED: 12/12/89 Safe

14 BKG COUNTS 99
SOURCE COUNTS 88

TYPE : Cs^{137} seed Tan
SERIAL NO.: 07647
CALIBRATED: 12/12/89 Safe

15 BKG COUNTS 99
SOURCE COUNTS 96

WIPE TEST DATA SHEET

CALIBRATION SOURCE:

TYPE : Cs-137
SERIAL NO.: 3411MR
CALIBRATED: 12/1/89

BKG COUNTS _____
SOURCE COUNTS _____

SEALED SOURCES:

TYPE :	Cs^{137} seed	Tan	1 BKG COUNTS 99
SERIAL NO.:	07642		
CALIBRATED:	12/12/89	Safe	SOURCE COUNTS 112
TYPE :	Cs^{137} seed	Tan	2 BKG COUNTS 99
SERIAL NO.:	04136		
CALIBRATED:	12/12/89	Safe	SOURCE COUNTS 89
TYPE :	Cs^{137} seed		3 BKG COUNTS 99
SERIAL NO.:	P2	Blue	
CALIBRATED:	12/29/79	Safe	SOURCE COUNTS 126
TYPE :	Cs^{137} seed		4 BKG COUNTS 99
SERIAL NO.:	J0	Blue	
CALIBRATED:	12/29/79	Safe	SOURCE COUNTS 112
TYPE :	Cs^{137} seed		5 BKG COUNTS 99
SERIAL NO.:	G3	Blue	
CALIBRATED:	12/29/79	Safe	SOURCE COUNTS 95
TYPE :	Cs^{137} seed		6 BKG COUNTS 99
SERIAL NO.:	J4	Blue	
CALIBRATED:	12/29/79	Safe	SOURCE COUNTS 99
TYPE :	Cs^{137} seed		7 BKG COUNTS 99
SERIAL NO.:	H6	Blue	
CALIBRATED:	12/29/79	Safe	SOURCE COUNTS 97
TYPE :	Cs^{137} seed		8 BKG COUNTS 99
SERIAL NO.:	G5	Blue	
CALIBRATED:	12/29/79	Safe	SOURCE COUNTS 114
TYPE :	Cs^{137} seed		9 BKG COUNTS 99
SERIAL NO.:	L0	Blue	
CALIBRATED:	12/29/79	Safe	SOURCE COUNTS 110
TYPE :	Cs^{137} seed		10 BKG COUNTS 99
SERIAL NO.:	L1	Blue	
CALIBRATED:	12/29/79	Safe	SOURCE COUNTS 98
TYPE :	Cs^{137} seed		11 BKG COUNTS 99
SERIAL NO.:	P1	Blue	
CALIBRATED:	12/29/79	Safe	SOURCE COUNTS 111
TYPE :	Cs^{137} seed		12 BKG COUNTS 99
SERIAL NO.:	P8	Blue	
CALIBRATED:	12/29/79	Safe	SOURCE COUNTS 122
TYPE :	Cs^{137} seed		13 BKG COUNTS 99
SERIAL NO.:	K9	Blue	
CALIBRATED:	12/29/79	Safe	SOURCE COUNTS 123
TYPE :	Cs^{137} seed		14 BKG COUNTS 99
SERIAL NO.:	P0	Blue	
CALIBRATED:	12/29/79	Safe	SOURCE COUNTS 114
TYPE :	Cs^{137} wire		15 BKG COUNTS 99
SERIAL NO.:	G1-50 C	Cart	
CALIBRATED:	11/8/79		SOURCE COUNTS 111

WIPE TEST DATA SHEET

CALIBRATION SOURCE:

TYPE : Cs-137
SERIAL NO.: 3411MR
CALIBRATED: 12/1/89

BKG COUNTS _____

SOURCE COUNTS _____

SEALED SOURCES:

TYPE : Cs^{137} wire
SERIAL NO.: G1-44C
CALIBRATED: 11/8/79 Cart

1 BKG COUNTS 99
SOURCE COUNTS 107

TYPE : Cs^{137} wire
SERIAL NO.: G1-46C
CALIBRATED: 11/8/79 Cart

2 BKG COUNTS 99
SOURCE COUNTS 95

TYPE : Cs^{137} wire
SERIAL NO.: G1-47C
CALIBRATED: 11/8/79 Cart

3 BKG COUNTS 99
SOURCE COUNTS 91

TYPE : Cs^{137} wire
SERIAL NO.: G1-45C
CALIBRATED: 11/8/79 Cart

4 BKG COUNTS 99
SOURCE COUNTS 98

TYPE : Cs^{137} wire
SERIAL NO.: G1 49C
CALIBRATED: 11/8/79 Cart

5 BKG COUNTS 99
SOURCE COUNTS 95

TYPE : Cs^{137} wire
SERIAL NO.: G1-48C
CALIBRATED: 11/8/79 Cart

6 BKG COUNTS 99
SOURCE COUNTS 122

TYPE : Cs^{137} wire
SERIAL NO.: G1-53C
CALIBRATED: 11/8/79 Cart

7 BKG COUNTS 99
SOURCE COUNTS 107

TYPE : Cs^{137} wire
SERIAL NO.: G1-52C
CALIBRATED: 11/8/79 Cart

8 BKG COUNTS 99
SOURCE COUNTS 113

TYPE : Cs^{137} wire
SERIAL NO.: G1-51C
CALIBRATED: 11/8/79 Cart

9 BKG COUNTS 99
SOURCE COUNTS 111

TYPE : Cs^{137} cal. source
SERIAL NO.: S-754
CALIBRATED: 2/18/91

10 BKG COUNTS 99
SOURCE COUNTS 106

TYPE : Gd 153
SERIAL NO.: 2373 LN
CALIBRATED: 3/9/90

11 BKG COUNTS 99
SOURCE COUNTS 101

TYPE : Gd 153
SERIAL NO.: 2373 LN
CALIBRATED: 11/28/91

12 BKG COUNTS 99
SOURCE COUNTS 95

TYPE : Sr^{-90} applicator
SERIAL NO.: RA-1
CALIBRATED: 10/1/69

13 BKG COUNTS 99
SOURCE COUNTS 114

TYPE : _____
SERIAL NO.: _____
CALIBRATED: _____

14 BKG COUNTS _____
SOURCE COUNTS _____

TYPE : _____
SERIAL NO.: _____
CALIBRATED: _____

15 BKG COUNTS _____
SOURCE COUNTS _____

*** IMPORTANT *** THOSE LEAK TESTS WHICH ARE ABOVE THE 0.005 uCi THRESHOLD MUST BE REMOVED FROM USE!!!

BOONE HOSPITAL CENTER
COLUMBIA, MISSOURI 65201

SEMI-ANNUAL WIPE TEST for
REMOVEABLE RADIOACTIVE CONTAMINATION from
NUCLEAR MEDICINE CALIBRATION CHECK SOURCES and BRACHYTHERAPY SOURCES

Date : 18-Jun-07

DETECTOR IDENTIFICATION, SETTINGS, AND CALIBRATION DATA:

Detector : CAPINTEC CAPRAC
SCINTILLATION WELL

Model Number CAPRAC
Serial Number : 1798
Window Setting open

ANALYZER CALIBRATION SOURCE DATA:

TYPE	SOURCE DESCRIPTION	CALIBRATION DATE	CALIBRATION ACTIVITY (in uCi)	CURRENT ACTIVITY (in uCi)	SERIAL NUMBER	BKG (cpm)	COUNTS (cpm)	NET (cpm)	COUNTING EFFICIENCY
Cs-137	Sealed Rod	01-Dec-89	0.1000000	0.066884534	CS1376-3340'	109	49500	49391	33.26%

SEALED SOURCE WIPE TEST DATA:

TYPE	SOURCE DESCRIPTION	CALIBRATION DATE	CALIBRATION ACTIVITY	CURRENT ACTIVITY	Units	SERIAL NUMBER	BKG (cpm)	WIPES (cpm)	NET (cpm)	CORRECTED NET (dpm)	CORRECTED ACTIVITY (in uCi)	THRESHOLD 0.005 uCi
Co-57	Button Marker		50	0.0000	uCi	1	99	117	18	54	0.00002	BELOW THRESHOLD
Co-57	Button Marker		50	0.0000	uCi	2	99	140	41	123	0.00006	BELOW THRESHOLD
Co-57	Button Marker	12/01/84	50	0.0000	uCi	NES-289	99	143	44	132	0.00006	BELOW THRESHOLD
Co-57	Line Source In Lead Foil	09/11/84	372	0.0000	uCi	1001	99	159	60	180	0.00008	BELOW THRESHOLD
Co-57	Sealed QC Vial	12/01/82	3.596	0.0000	mCi	CTR. 566	99	107	8	24	0.00001	BELOW THRESHOLD
Co-57	Sealed QC Vial	03/01/88	5.499	0.0000	mCi	7634MA	99	165	66	198	0.00009	BELOW THRESHOLD
Co-57	Sealed QC Vial	08/23/77	0.855	0.0000	mCi	NONE	99	117	18	54	0.00002	BELOW THRESHOLD
Co-57	Sealed QC Vial	02/22/91	5.86	0.0000	mCi	184/1642	99	115	16	48	0.00002	BELOW THRESHOLD
Co-57	Sealed QC Vial	04/01/94	6.09	0.0000	mCi	503/2822	99	130	31	93	0.00004	BELOW THRESHOLD
Co-57	Sealed QC Vial	05/05/86	3.17	0.0000	mCi	736/106	99	164	65	195	0.00009	BELOW THRESHOLD
Co-57	Sealed Rod	12/01/89	0.1	0.0000	uCi	BV431	99	90	0	0	0.00000	BELOW THRESHOLD
Co-57	Sealed Rod	12/01/97	0.09543	0.0000	uCi	583-26	99	94	0	0	0.00000	BELOW THRESHOLD
Co-57	Sealed Rod	01/12/96	0.1103	0.0000	uCi	EV444	99	102	3	9	0.00000	BELOW THRESHOLD
Co-57	Sealed Rod	04/05/94	0.1081	0.0000	uCi	BY731	99	137	38	114	0.00005	BELOW THRESHOLD
Co-57	Telescoping Pointer	05/01/80	50	0.0000	uCi	NONE	99	143	44	132	0.00006	BELOW THRESHOLD
Co-60	Sealed QC Vial	08/23/77	96	1.9031	uCi	NONE	99	90	0	0	0.00000	BELOW THRESHOLD
Cs-137	25 Cc Glass Vial W/Liquid	09/01/72	11.5	5.1796	uCi	NONE	99	116	17	51	0.00002	BELOW THRESHOLD
Cs-137	Sealed QC Vial	08/23/77	102	51.4902	uCi	NONE	99	135	36	108	0.00005	BELOW THRESHOLD
Cs-137	Sealed Rod		0.1	0.0085	uCi	NONE	99	103	4	12	0.00001	BELOW THRESHOLD

Wipe Test(s) done by: Susie Myers Date: 6/18/07 R.S.O. Review done by: Susie Myers Date: 6/18/07

*** IMPORTANT *** THOSE LEAK TESTS WHICH ARE ABOVE THE 0.005 uCi THRESHOLD MUST BE REMOVED FROM USE!!!

BOONE HOSPITAL CENTER
COLUMBIA, MISSOURI 65201

SEMI-ANNUAL WIPE TEST for
REMOVEABLE RADIOACTIVE CONTAMINATION from
NUCLEAR MEDICINE CALIBRATION CHECK SOURCES and BRACHYTHERAPY SOURCES

Date : 18-Jun-07

DETECTOR IDENTIFICATION, SETTINGS, AND CALIBRATION DATA:

Detector : CAPINTEC CAPRAC
SCINTILLATION WELL

Model Number CAPRAC
Serial Number : 1798
Window Setting open

ANALYZER CALIBRATION SOURCE DATA:

TYPE	SOURCE DESCRIPTION	CALIBRATION DATE	CALIBRATION ACTIVITY (in uCi)	CURRENT ACTIVITY (in uCi)	SERIAL NUMBER	BKG (cpm)	COUNTS (cpm)	NET (cpm)	COUNTING EFFICIENCY
Cs-137	Sealed Rod	01-Dec-89	0.1000000	0.066884534	CS1376-3340'	109	49500	49391	33.26%

SEALED SOURCE WIPE TEST DATA:

TYPE	SOURCE DESCRIPTION	CALIBRATION DATE	CALIBRATION ACTIVITY	CURRENT ACTIVITY	Units	SERIAL NUMBER	BKG (cpm)	WIPES (cpm)	NET (cpm)	CORRECTED NET (dpm)	CORRECTED ACTIVITY (in uCi)	THRESHOLD 0.005 uCi
Cs-137	Sealed Rod	05/13/75	29	13.8936	uCi	NONE	99	121	22	66	0.00003	BELOW THRESHOLD
Cs-137	Sealed Rod	Unknown	1	0.0851	uCi	N/A	99	138	39	117	0.00005	BELOW THRESHOLD
Ba-133	Sealed Rod	12/01/89	0.1	0.0315	uCi	BA1334-33401	99	107	8	24	0.00001	BELOW THRESHOLD
Co-57	Sealed QC Vial	12/01/97	4.91	0.0007	mCi	584-10	99	123	24	72	0.00003	BELOW THRESHOLD
Co-57	Sealed Rod	09/01/03	0.1132	0.0033	uCi	962-81-2	99	125	26	78	0.00004	BELOW THRESHOLD
Co-57	Sealed Rod	09/01/99	0.1074	0.0001	uCi	BO996	99	141	42	126	0.00006	BELOW THRESHOLD
Co-57	Uniformity Flood Source	10/02/96	20.77	0.0010	mCi	2423MQ	99	137	38	114	0.00005	BELOW THRESHOLD
Co-57	Uniformity Flood Source	04/15/82	5	0.0000	mCi	NES-391	99	116	17	51	0.00002	BELOW THRESHOLD
Co-57	Uniformity Flood Source	12/19/97	20	0.0029	mCi	A7610	99	124	25	75	0.00003	BELOW THRESHOLD
Cs-137	CPET - Transmission	02/15/00	5	4.2259	mCi	303/97	99	149	50	150	0.00007	BELOW THRESHOLD
Cs-137	MCD/AC	08/01/98	30	24.4749	mCi	BC-779	99	116	17	51	0.00002	BELOW THRESHOLD
Cs-137	MCD/AC	08/01/98	30	24.4749	mCi	BC-778	99	120	21	63	0.00003	BELOW THRESHOLD
Ge-68	Sealed Aluminum Rod	09/01/98	690	0.1899	uCi	1251	99	136	37	111	0.00005	BELOW THRESHOLD
Ge-68	Sealed Aluminum Rod	01/06/97	430	0.0254	uCi	821	99	132	33	99	0.00004	BELOW THRESHOLD
Na-22	Allegro PET QC Source	04/01/03	100	32.6271	uCi	915-48-30	99	135	36	108	0.00005	BELOW THRESHOLD
Na-22	Allegro PET QC Source	01/12/99	100	10.6375	uCi	681-59-3	99	139	40	120	0.00005	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/12/89	26.25	17.5693	mCi	07650	99	123	24	72	0.00003	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/12/89	26.5	17.7366	mCi	07637	99	122	23	69	0.00003	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/12/89	38.75	25.9357	mCi	05463	99	105	6	18	0.00001	BELOW THRESHOLD

Wipe Test(s) done by:_____ Date:_____ R.S.O. Review done by: _____ Date:_____

*** IMPORTANT *** THOSE LEAK TESTS WHICH ARE ABOVE THE 0.005 uCi THRESHOLD MUST BE REMOVED FROM USE!!!

BOONE HOSPITAL CENTER
COLUMBIA, MISSOURI 65201

SEMI-ANNUAL WIPE TEST for
REMOVEABLE RADIOACTIVE CONTAMINATION from
NUCLEAR MEDICINE CALIBRATION CHECK SOURCES and BRACHYTHERAPY SOURCES

Date : 18-Jun-07

DETECTOR IDENTIFICATION, SETTINGS, AND CALIBRATION DATA:

Detector : CAPINTEC CAPRAC
SCINTILLATION WELL

Model Number CAPRAC
Serial Number : 1798
Window Setting open

ANALYZER CALIBRATION SOURCE DATA:

TYPE	SOURCE DESCRIPTION	CALIBRATION DATE	CALIBRATION ACTIVITY (in uCi)	CURRENT ACTIVITY (in uCi)	SERIAL NUMBER	BKG (cpm)	COUNTS (cpm)	NET (cpm)	COUNTING EFFICIENCY
Cs-137	Sealed Rod	01-Dec-89	0.1000000	0.066884534	CS1376-3340'	109	49500	49391	33.26%

SEALED SOURCE WIPE TEST DATA:

TYPE	SOURCE DESCRIPTION	CALIBRATION DATE	CALIBRATION ACTIVITY	CURRENT ACTIVITY	Units	SERIAL NUMBER	BKG (cpm)	WIPES (cpm)	NET (cpm)	CORRECTED NET (dpm)	CORRECTED ACTIVITY (in uCi)	THRESHOLD 0.005 uCi
Cs-137	Sealed Brachy. Seed	12/12/89	26.75	17.9040	mCi	07659	99	114	15	45	0.00002	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/12/89	38.5	25.7683	mCi	05479	99	104	5	15	0.00001	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/12/89	38.5	25.7683	mCi	05474	99	107	8	24	0.00001	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/12/89	53.25	35.6406	mCi	04124	99	104	5	15	0.00001	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/12/89	38.5	25.7683	mCi	05462	99	96	0	0	0.00000	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/12/89	26.5	17.7366	mCi	07658	99	88	0	0	0.00000	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/12/89	26.75	17.9040	mCi	07647	99	96	0	0	0.00000	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/12/89	26.5	17.7366	mCi	07642	99	112	13	39	0.00002	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/12/89	53.25	35.6406	mCi	04136	99	89	0	0	0.00000	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/29/79	52	27.7023	mCi	P2	99	126	27	81	0.00004	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/29/79	26.75	14.2507	mCi	J0	99	112	13	39	0.00002	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/29/79	25.5	13.5848	mCi	G3	99	95	0	0	0.00000	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/29/79	26	13.8512	mCi	J4	99	99	0	0	0.00000	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/29/79	26.5	14.1175	mCi	H6	99	97	0	0	0.00000	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/29/79	38.25	20.3772	mCi	G9	99	114	15	45	0.00002	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/29/79	39.25	20.9099	mCi	L0	99	110	11	33	0.00001	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/29/79	39.5	21.0431	mCi	L1	99	98	0	0	0.00000	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/29/79	53	28.2350	mCi	P1	99	111	12	36	0.00002	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/29/79	54.75	29.1673	mCi	P8	99	122	23	69	0.00003	BELOW THRESHOLD

Wipe Test(s) done by:_____ Date:_____ R.S.O. Review done by: fm Date:_____

*** IMPORTANT *** THOSE LEAK TESTS WHICH ARE ABOVE THE 0.005 uCi THRESHOLD MUST BE REMOVED FROM USE!!!

BOONE HOSPITAL CENTER
COLUMBIA, MISSOURI 65201

SEMI-ANNUAL WIPE TEST for
REMOVEABLE RADIOACTIVE CONTAMINATION from
NUCLEAR MEDICINE CALIBRATION CHECK SOURCES and BRACHYTHERAPY SOURCES

Date : 18-Jun-07

DETECTOR IDENTIFICATION, SETTINGS, AND CALIBRATION DATA:

Detector : CAPINTEC CAPRAC
SCINTILLATION WELL

Model Number CAPRAC
Serial Number : 1798
Window Setting open

ANALYZER CALIBRATION SOURCE DATA:

TYPE	SOURCE DESCRIPTION	CALIBRATION DATE	CALIBRATION ACTIVITY (in uCi)	CURRENT ACTIVITY (in uCi)	SERIAL NUMBER	BKG (cpm)	COUNTS (cpm)	NET (cpm)	COUNTING EFFICIENCY
Cs-137	Sealed Rod	01-Dec-89	0.1000000	0.066884534	CS1376-3340'	109	49500	49391	33.26%

SEALED SOURCE WIPE TEST DATA:

TYPE	SOURCE DESCRIPTION	CALIBRATION DATE	CALIBRATION ACTIVITY	CURRENT ACTIVITY	Units	SERIAL NUMBER	BKG (cpm)	WIPES (cpm)	NET (cpm)	CORRECTED NET (dpm)	CORRECTED ACTIVITY (in uCi)	THRESHOLD 0.005 uCi
Cs-137	Sealed Brachy. Seed	12/29/79	39	20.7767	mCi	K9	99	123	24	72	0.00003	BELOW THRESHOLD
Cs-137	Sealed Brachy. Seed	12/29/79	53	28.2350	mCi	P0	99	114	15	45	0.00002	BELOW THRESHOLD
Cs-137	Sealed Brachy. Wire	11/08/79	24.5	13.0103	mCi	G1-50C	99	111	12	36	0.00002	BELOW THRESHOLD
Cs-137	Sealed Brachy. Wire	11/08/79	24.75	13.1431	mCi	G1-44C	99	107	8	24	0.00001	BELOW THRESHOLD
Cs-137	Sealed Brachy. Wire	11/08/79	24.75	13.1431	mCi	G1-46C	99	95	0	0	0.00000	BELOW THRESHOLD
Cs-137	Sealed Brachy. Wire	11/08/79	25.75	13.6741	mCi	G1-47C	99	91	0	0	0.00000	BELOW THRESHOLD
Cs-137	Sealed Brachy. Wire	11/08/79	25.75	13.6741	mCi	G1-45C	99	98	0	0	0.00000	BELOW THRESHOLD
Cs-137	Sealed Brachy. Wire	11/08/79	25.75	13.6741	mCi	G1-49C	99	95	0	0	0.00000	BELOW THRESHOLD
Cs-137	Sealed Brachy. Wire	11/08/79	25	13.2759	mCi	G1-48C	99	122	23	69	0.00003	BELOW THRESHOLD
Cs-137	Sealed Brachy. Wire	11/08/79	25.25	13.4086	mCi	G1-53C	99	107	8	24	0.00001	BELOW THRESHOLD
Cs-137	Sealed Brachy. Wire	11/08/79	25.75	13.6741	mCi	G1-52C	99	113	14	42	0.00002	BELOW THRESHOLD
Cs-137	Sealed Brachy. Wire	11/08/79	24.75	13.1431	mCi	G1-51C	99	111	12	36	0.00002	BELOW THRESHOLD
Cs-137	Survey Meter Cal. Source	02/18/91	142.5	98.0039	mCi	S-754	99	106	7	21	0.00001	BELOW THRESHOLD
Gd-153	Bone Density Source	03/09/90	1000	0.0000	mCi	2373LN	99	101	2	6	0.00000	BELOW THRESHOLD
Gd-153	Bone Density Source	11/28/91	1000	0.0001	mCi	2945LN	99	95	0	0	0.00000	BELOW THRESHOLD
Sr-90	Sealed Applicator	10/01/69	60	24.4245	mCi	NONE	99	114	15	45	0.00002	BELOW THRESHOLD

Wipe Test(s) done by:_____ Date:_____ R.S.O. Review done by: _____ Date:_____

Liesje Myers, R.S.O.
Boone Hospital Center
1600 E. Broadway
Columbia, MO 65201

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CERTIFIED MAIL

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RETURN RECEIPT REQUESTED

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Materials Licensing Section
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