

Parker, Bryan

From: Jackson, Alan (RSO) <AlanJ@rad.hfh.edu>
Sent: Tuesday, December 09, 2014 12:12 PM
To: Parker, Bryan
Subject: Henry Ford License: Sources from Cottage
Attachments: Cottage Scanned Leak Tests.pdf

Bryan,

The last leak tests done at Cottage Hospital are attached. None were leaking. Please let me know if you want a more recent leak test. Those sources were all brought to Henry Ford Hospital. I have all of them slated for disposal.

-Alan

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Date: 06/01/2012

>>> Sealed Source Leak Test <<<

HENRY FORD COTTAGE HOSP - MI1
159 KERCHEVAL

Date of Test - 06/01/2012 @11:08

*****>> STANDARD SOURCE <<*****

Isotope - Co-57 Serial # - 1278-46-28
Type - ROD SOURCE Manufact. - E&Z IPL
Activity - 1.01600 uCi on 02/01/2008 Currnt Act - 0.01778 uCi

*****>> COUNTING INSTRUMENT <<*****

Instrument Name - WIPE TEST COUNTER Model Number - CAPRAC
Manufacturer - CAPINTEC Serial Number - 001324
Last Calibration - 06/01/2012 Instrument ID - "WT"

*****>> SEALED SOURCE TESTED <<*****

Isotope - Co-57 Serial # - 1586-173
Type - FLOOD FIELD SOURCE Manufact. - E&Z
Activity - 10.0000 mCi on 05/01/2012 Currnt Act - 9.2379 mCi on Test Date

*****>> COUNTING DATA <<*****

Gross Std Srce Counts (Gstd)	35310	Standard Source Time..(Tstd)	1.0 Min
Standard Source Bkg... (Bstd)	240	Std Source Bkg Time... (Xstd)	1.0 Min
Net Std Count Rate.... (Rstd)	35070 Cpm		
Gross Sample Counts... (Gsam)	241	Sample Count Time.... (Tsam)	1.0 Min
Sample Bkg Counts.... (Bsam)	238	Sample Bkg Count Time. (Xsam)	1.0 Min
Sample Bkg Count Rate. (Rbkg)	238 Cpm	Net Sample Count Rate. (Rsam)	3 Cpm

*****>> CALCULATION FORMAT <<*****

Net Std Count Rate (Rstd) = Gstd/Tstd - Bstd/Xstd Net Sample Count Rate (Rsam) = Gsam/Tsam - Bsam/Xsam

Instrument Net Std Cpm (Rstd) 35070 Cpm

Efficiency = ----- = ----- = 0.89650 Cpm/Dpm or 89.65 %

Standard Dpm 0.01778 uCi x 2200000 Dpm/uCi

(Note: Z = 1.65, Factor From Standard Normal Distribution z scale for 95% Confidence Interval)

2 1/2

Detection	Z		Rbkg		Xsam				
Limit	=	----	+ 2Z		----		1 + ----- = 75 Cpm Net Sample Cpm!!		
			Tsam		Xsam		Tsam		= 0.00003788 uCi

Wipe

Sample Sample Net 3 Cpm

Activity = ----- = ----- = Activity <= Detection Limit of 0.000038 uCi

Std Cpm/uCi 1972301 Cpm/uCi

*****>> Comments and Recommendations <<*****

The Removable contamination on this sealed source is within the maximum
limit of 0.005 uCi Removable activity is <= Detection limit !
PERFORMED BY MITCHELL PILAT

Sealed Source Leak testing must be performed periodically in accordance
With Applicable Facility License Conditions-Consult Facility License
This source is due for its next Leak test by: Thursday November 29, 2012

Performed by: M. Pilot as Title: _____

Radiation Safety Officer: *[Signature]*

Date: 06/01/2012

>>> Sealed Source Leak Test <<<

HENRY FORD COTTAGE HOSP - MI1
159 KERCHEVAL

Date of Test - 06/01/2012 @11:07

*****>> STANDARD SOURCE <<*****

Isotope - Co-57 Serial # - 1278-46-28
Type - ROD SOURCE Manufact. - E&Z IPL
Activity - 1.01600 uCi on 02/01/2008 Currnt Act - 0.01778 uCi

*****>> COUNTING INSTRUMENT <<*****

Instrument Name - WIPE TEST COUNTER Model Number - CAPRAC
Manufacturer - CAPINTEC Serial Number - 001324
Last Calibration - 06/01/2012 Instrument ID - "WT"

*****>> SEALED SOURCE TESTED <<*****

Isotope - Co-57 Serial # - 1474-058
Type - FLOOD FIELD SOURCE Manufact. - E & Z IPL
Activity - 10.0000 mCi on 02/01/2011 Currnt Act - 2.8858 mCi on Test Date

*****>> COUNTING DATA <<*****

Gross Std Srce Counts (Gstd) 35310 Standard Source Time..(Tstd) 1.0 Min
Standard Source Bkg... (Bstd) 240 Std Source Bkg Time... (Xstd) 1.0 Min
Net Std Count Rate... (Rstd) 35070 Cpm
Gross Sample Counts... (Gsam) 241 Sample Count Time....(Tsam) 1.0 Min
Sample Bkg Counts.... (Bsam) 238 Sample Bkg Count Time. (Xsam) 1.0 Min
Sample Bkg Count Rate. (Rbkg) 238 Cpm Net Sample Count Rate. (Rsam) 3 Cpm

*****>> CALCULATION FORMAT <<*****

Net Std Count Rate (Rstd) = Gstd/Tstd - Bstd/Xstd Net Sample Count Rate (Rsam) = Gsam/Tsam - Bsam/Xsam

Instrument Net Std Cpm (Rstd) 35070 Cpm

Efficiency = ----- = 0.89650 Cpm/Dpm or 89.65 %

Standard Dpm 0.01778 uCi x 2200000 Dpm/uCi

(Note: Z = 1.65, Factor From Standard Normal Distribution z scale for 95% Confidence Interval)

2 - - - - - 1/2

Detection Limit = ----- + 2Z | ----- | 1 + ----- | | = 75 Cpm Net Sample Cpm!!
Tsam | Xsam | Tsam | | = 0.00003788 uCi

Wipe

Sample Net 3 Cpm

Activity = ----- = Activity <= Detection Limit of 0.000038 uCi

Std Cpm/uCi 1972301 Cpm/uCi

*****>> Comments and Recommendations <<*****

The Removable contamination on this sealed source is within the maximum limit of 0.005 uCi Removable activity is <= Detection limit !
PERFORMED BY MITCHELL PILAT

Sealed Source Leak testing must be performed periodically in accordance With Applicable Facility License Conditions-Consult Facility License
This source is due for its next Leak test by: Thursday November 29, 2012

Performed by: M. P. [Signature] Title: _____

Radiation Safety Officer: [Signature]

Date: 06/01/2012

>>> Sealed Source Leak Test <<<

HENRY FORD COTTAGE HOSP - MI1
159 KERCHEVAL

Date of Test - 06/01/2012 @11:07

*****>> STANDARD SOURCE <<*****

Isotope - Co-57 Serial # - 1278-46-28
Type - ROD SOURCE Manufact. - E&Z IPL
Activity - 1.01600 uCi on 02/01/2008 Currnt Act - 0.01778 uCi

*****>> COUNTING INSTRUMENT <<*****

Instrument Name - WIPE TEST COUNTER Model Number - CAPRAC
Manufacturer - CAPINTEC Serial Number - 001324
Last Calibration - 06/01/2012 Instrument ID - "WT"

*****>> SEALED SOURCE TESTED <<*****

Isotope - Co-57 Serial # - 1461-73-32
Type - VIAL REFERENCE SOURCE Manufact. - E&Z
Activity - 5.6690 mCi on 09/01/2011 Currnt Act - 2.8133 mCi on Test Date

*****>> COUNTING DATA <<*****

Gross Std Srce Counts (Gstd) 35310 Standard Source Time..(Tstd) 1.0 Min
Standard Source Bkg... (Bstd) 240 Std Source Bkg Time... (Xstd) 1.0 Min
Net Std Count Rate.... (Rstd) 35070 Cpm
Gross Sample Counts... (Gsam) 241 Sample Count Time.... (Tsam) 1.0 Min
Sample Bkg Counts.... (Bsam) 238 Sample Bkg Count Time. (Xsam) 1.0 Min
Sample Bkg Count Rate. (Rbkg) 238 Cpm Net Sample Count Rate. (Rsam) 3 Cpm

*****>> CALCULATION FORMAT <<*****

Net Std Count Rate (Rstd) = Gstd/Tstd - Bstd/Xstd Net Sample Count Rate (Rsam) = Gsam/Tsam - Bsam/Xsam

Instrument Net Std Cpm (Rstd) 35070 Cpm
Efficiency = ----- = ----- = 0.89650 Cpm/Dpm or 89.65 %
Standard Dpm 0.01778 uCi x 2200000 Dpm/uCi

(Note: Z = 1.65, Factor From Standard Normal Distribution z scale for 95% Confidence Interval)

Detection Limit = ----- + 2Z | ----- | 1 + ----- | | = 75 Cpm Net Sample Cpm!!
Tsam | Xsam | Tsam | | = 0.00003788 uCi

Wipe
Sample Sample Net 3 Cpm
Activity = ----- = ----- = Activity <= Detection Limit of 0.000038 uCi
Std Cpm/uCi 1972301 Cpm/uCi

*****>> Comments and Recommendations <<*****

The Removable contamination on this sealed source is within the maximum limit of 0.005 uCi Removable activity is <= Detection limit !
PERFORMED BY MITCHELL PILAT

Sealed Source Leak testing must be performed periodically in accordance With Applicable Facility License Conditions-Consult Facility License
This source is due for its next Leak test by: Thursday November 29, 2012

Performed by: M. P. Lutz Title: _____

Radiation Safety Officer: [Signature]

Date: 06/01/2012

>>> Sealed Source Leak Test <<<

HENRY FORD COTTAGE HOSP - MI1
159 KERCHEVAL

Date of Test - 06/01/2012 @11:06

*****>> STANDARD SOURCE <<*****

Isotope - Co-57 Serial # - 1278-46-28
Type - ROD SOURCE Manufact. - E&Z IPL
Activity - 1.01600 uCi on 02/01/2008 Currnt Act - 0.01778 uCi

*****>> COUNTING INSTRUMENT <<*****

Instrument Name - WIPE TEST COUNTER Model Number - CAPRAC
Manufacturer - CAPINTEC Serial Number - 001324
Last Calibration - 06/01/2012 Instrument ID - "WT"

*****>> SEALED SOURCE TESTED <<*****

Isotope - Co-57 Serial # - 1288-9-24
Type - VIAL REFERENCE SOURCE Manufact. - E&Z IPL
Activity - 5.2600 mCi on 03/01/2008 Currnt Act - 99.1428 uCi on Test Date

*****>> COUNTING DATA <<*****

Gross Std Srce Counts (Gstd) 35310 Standard Source Time..(Tstd) 1.0 Min
Standard Source Bkg... (Bstd) 240 Std Source Bkg Time... (Xstd) 1.0 Min
Net Std Count Rate... (Rstd) 35070 Cpm
Gross Sample Counts... (Gsam) 241 Sample Count Time.... (Tsam) 1.0 Min
Sample Bkg Counts.... (Bsam) 238 Sample Bkg Count Time. (Xsam) 1.0 Min
Sample Bkg Count Rate. (Rbkg) 238 Cpm Net Sample Count Rate. (Rsam) 3 Cpm

*****>> CALCULATION FORMAT <<*****

Net Std Count Rate (Rstd) = Gstd/Tstd - Bstd/Xstd Net Sample Count Rate (Rsam) = Gsam/Tsam - Bsam/Xsam

Instrument Net Std Cpm (Rstd) 35070 Cpm

Efficiency = ----- = 0.89650 Cpm/Dpm or 89.65 %

Standard Dpm 0.01778 uCi x 2200000 Dpm/uCi

(Note: Z = 1.65, Factor From Standard Normal Distribution z scale for 95% Confidence Interval)

Detection Limit = ----- = 75 Cpm Net Sample Cpm!!
Activity = ----- = 0.00003788 uCi

Wipe

Sample Sample Net 3 Cpm

Activity = ----- = Activity <= Detection Limit of 0.000038 uCi

Std Cpm/uCi 1972301 Cpm/uCi

*****>> Comments and Recommendations <<*****

The Removable contamination on this sealed source is within the maximum limit of 0.005 uCi Removable activity is <= Detection limit !

PERFORMED BY MITCHELL PFLAUM

Sealed Source Leak testing must be performed periodically in accordance With Applicable Facility License Conditions-Consult Facility License This source is due for its next Leak test by: Thursday November 29, 2012

Performed by: M. P. Lat Title: _____

Radiation Safety Officer: [Signature]

Date: 06/01/2012

>>> Sealed Source Leak Test <<<

HENRY FORD COTTAGE HOSP - MI1
159 KERCHEVAL

Date of Test - 06/01/2012 @10:59

*****>> STANDARD SOURCE <<*****

Isotope - Cs-137 Serial # - 1278-2-2
Type - ROD SOURCE Manufact. - E&Z IPL
Activity - 1.02900 uCi on 08/01/2008 Currnt Act - 0.94227 uCi

*****>> COUNTING INSTRUMENT <<*****

Instrument Name - WIPE TEST COUNTER Model Number - CAPRAC
Manufacturer - CAPINTEC Serial Number - 001324
Last Calibration - 06/01/2012 Instrument ID - "WT"

*****>> SEALED SOURCE TESTED <<*****

Isotope - Cs-137 Serial # - CDC.V13363MA
Type - VIAL REFERENCE SOURCE Manufact. - AMERSHAM
Activity - 276.2000 uCi on 03/01/1983 Currnt Act -141.0548 uCi onTest Date

*****>> COUNTING DATA <<*****

Gross Std Srce Counts (Gstd) 560500 Standard Source Time..(Tstd) 1.0 Min
Standard Source Bkg... (Bstd) 252 Std Source Bkg Time... (Xstd) 1.0 Min
Net Std Count Rate... (Rstd) 560248 Cpm
Gross Sample Counts... (Gsam) 239 Sample Count Time.... (Tsam) 1.0 Min
Sample Bkg Counts... (Bsam) 252 Sample Bkg Count Time. (Xsam) 1.0 Min
Sample Bkg Count Rate. (Rbkg) 252 Cpm Net Sample Count Rate. (Rsam) 0 Cpm

*****>> CALCULATION FORMAT <<*****

Net Std Count Rate (Rstd) = Gstd/Tstd - Bstd/Xstd Net Sample Count Rate (Rsam) = Gsam/Tsam - Bsam/Xsam
Instrument Net Std Cpm (Rstd) 560248 Cpm

Efficiency = ----- = ----- = 0.27026 Cpm/Dpm or 27.03 %
Standard Dpm 0.94227 uCi x 2200000 Dpm/uCi

(Note: Z = 1.65, Factor From Standard Normal Distribution z scale for 95% Confidence Interval)

z ----- 1/2
Detection Z | Rbkg | Xsam | |
Limit = ---- + 2Z | ---- | 1 + ---- | | = 77 Cpm Net Sample Cpm!!
Tsam | Xsam | Tsam | | = 0.00012918 uCi

Wipe

Sample Sample Net 0 Cpm

Activity = ----- = ----- = Activity <= Detection Limit of 0.000129 uCi
Std Cpm/uCi 594570 Cpm/uCi

*****>> Comments and Recommendations <<*****

The Removable contamination on this sealed source is within the maximum limit of 0.005 uCi. Removable activity is <= Detection limit !

PERFORMED BY MITCHELL PILAT

Sealed Source Leak testing must be performed periodically in accordance With Applicable Facility License Conditions-Consult Facility License This source is due for its next Leak test by: Thursday November 29, 2012

Performed by: M. P. West Title: _____

Radiation Safety Officer: [Signature]

