



LAKEVIEW DIAGNOSTIC, L.L.C.

36211 JEFFERSON AVENUE • HARRISON TOWNSHIP, MI 48045
586.466.6260 • FAX 586.466.6265

January 26, 2018

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

Re: Termination of License # 21-32817-01MD

To Whom It May Concern:

This letter is to inform you of the closing of Lakeview Diagnostic facility in Harrison Township Michigan under license no. 21-32817-01MD.

Enclosed you will find the following information:

- A. NRC form 314 - Certificate of disposition of materials. All sources were removed from Lakeview Diagnostic facility in Harrison Township, MI on January 11, 2018.
- B. Final Copies of radioactive waste. Stericycle Medical Waste Tracking Form Number MDTD00HPFI. Final disposal of regulated medical waste was on 10/20/2017.
- C. Source list shipped from Lakeview Diagnostic Pharmacy in Harrison Township, MI to Heartlight Pharmacy Services in Lima, OH.
- D. Shipment Report of sources from Lakeview Diagnostic Pharmacy in Harrison Township, MI to Heartlight Pharmacy Services in Lima, OH. Actual Shipment Date/Time – 01/11/2018 13:32.
- E. Historical Review – Our historical use of this Radioactive Material is the following.
 1. Did not use any Byproducts from 6A and/or 6F. There was no compounding of Iodine 131 and/or redistribution of used and unused molybdenum-99/technetium generators.
 2. Lakeview Diagnostic did use and transfer Byproduct materials from 6B, 6C, 6D, 6E, 6G, 6H, and 6I.
 3. The approximate time of last use of radioactive material was June 28, 2017. There were no spills or contaminated materials.
- F. Random wipes were taken on January 26, 2018. Area wiped included floors, doorknobs, generator /waste rooms, and clean air room. There was no action level detected.

RECEIVED JAN 30 2018



LAKEVIEW DIAGNOSTIC, L.L.C.

36211 JEFFERSON AVENUE • HARRISON TOWNSHIP, MI 48045
586.466.6260 • FAX 586.466.6265

If you have any questions please contact David Schmitt, R.Ph, RSO at (810) 650-7993 cell or email dschmitt@lakeviewdx.net.

Regards,

David Schmitt, R.Ph., RSO
Pharmacy Manager



CERTIFICATE OF DISPOSITION OF MATERIALS

Estimated burden per response to comply with this mandatory collection request: 30 minutes. This submittal is used by NRC as part of the basis for its determination that the facility is released for unrestricted use. Send comments regarding burden estimate to the FOIA, Privacy, and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0028), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

LICENSEE NAME AND ADDRESS

Lakeview Diagnostic
36211 Jefferson Avenue
Harrison Township, MI 48045

LICENSE NUMBER

21-32817-01MD

DOCKET NUMBER

030-38442

LICENSE EXPIRATION DATE

May 31, 2021

A. LICENSE STATUS (Check the appropriate box)

- This license has expired.
- This license has not yet expired; please terminate it.

B. DISPOSAL OF RADIOACTIVE MATERIAL

(Check the appropriate boxes and complete as necessary. If additional space is needed, provide attachments)

The licensee, or any individual executing this certificate on behalf of the licensee, certifies that:

- 1. No radioactive materials have ever been procured or possessed by the licensee under this license.
- 2. All activities authorized by this license have ceased, and all radioactive materials procured and/or possessed by the licensee under this license number cited above have been disposed of in the following manner.
 - a. Transfer of radioactive materials to the licensee listed below:
02500020000 Heartlight Pharmacy Services 1331 N. Cole Street, Lima, OH 45801-3413
 - b. Disposal of radioactive materials:
 - 1. Directly by the licensee:
 - 2. By licensed disposal site:
 - 3. By waste contractor:
 - c. All radioactive materials have been removed such that any remaining residual radioactivity is within the limits of 10 CFR Part 20, Subpart E, and is ALARA.

C. SURVEYS PERFORMED AND REPORTED

- 1. A radiation survey was conducted by the licensee. The survey confirms:
 - a. the absence of licensed radioactive materials
 - b. that any remaining residual radioactivity is within the limits of 10 CFR 20, Subpart E, and is ALARA.
- 2. A copy of the radiation survey results:
 - a. is attached; or b. is not attached (Provide explanation); or c. was forwarded to NRC on: _____ Date
- 3. A radiation survey is not required as only sealed sources were ever possessed under this license, and
 - a. The results of the latest leak test are attached; and/or
 - b. No leaking sources have ever been identified.

The person to be contacted regarding the information provided on this form:

NAME	TITLE	TELEPHONE (Include Area Code)	E-MAIL ADDRESS
David Schmitt	Radiation Safety Officer	810-650-7993	dschmitt@lakeviewdx.net

Mail all future correspondence regarding this license to:

6133 Lakeshore Road, Lexington, Michigan 48450

C. CERTIFYING OFFICIAL

I CERTIFY UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT

PRINTED NAME AND TITLE	SIGNATURE	DATE
David Schmitt Pharmacy Manager		January 26, 2018

WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECT. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

Wipe Meter Validation Report

Lakeview Diagnostic

36211 Jefferson Ave

Harrison Twp, MI 48045

21-32817-01MD EXP 05-31-2021

Date: from 01/11/2018 to 01/11/2018

Meter: Caprac Well Counter A
Model: Caprac

Serial #: 002234
Description: Caprac A

Action Limit: 5.00%

Date	Time	Probe	Source	Bkgd	Net	Predicted	% Dev	Battery	Performed By	Notes
01/11/2018	12:05	Capintec Caprac Well	S/N:002234 Eckert & Ziegler Cs137 Rod Source	S/N:1438-28-8 (0.103	0.00	55900	54235.76	3.07	PASS	David Schmitt

The above report indicates all of the Meter Constancy test(s) have passed.

Technologist Signature: _____

RSO Signature: _____

Printed: 1/26/2018 12:27:55 PM

Page: 1

CERTIFICATE OF INSTRUMENT CALIBRATION

Location:	Lakeview Diagnostic LLC 36211 Jefferson Harrison Twp, MI 48045
Instrument/Mfgr:	Ludlum
Type:	GM
Model Number:	14C
Serial Number:	192017
Probe Type:	SWG M
Calibration Geometry:	Perpendicular

Calibration Source

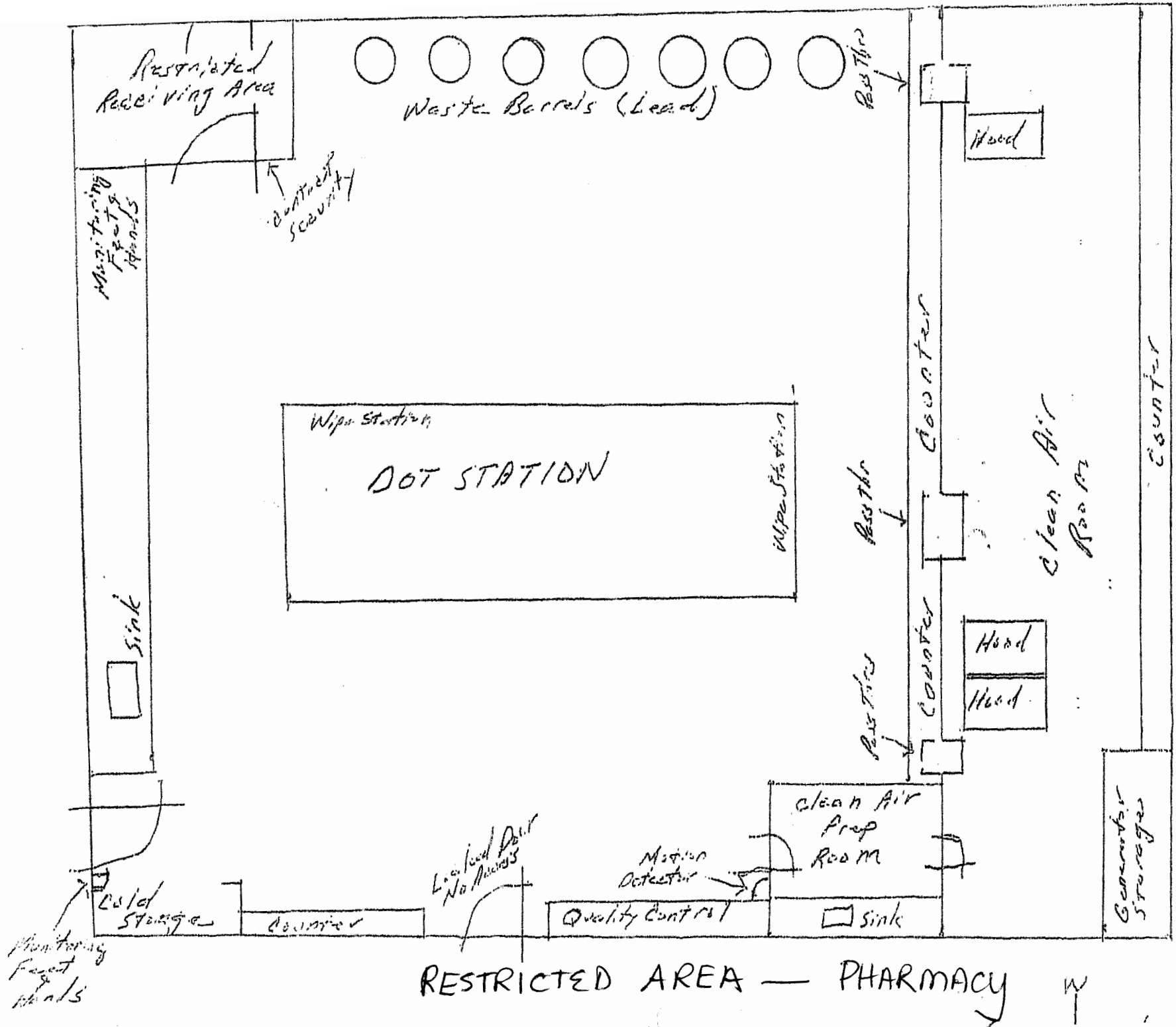
Nuclide	Exposure Rate	Calibration Accuracy
Cs-137	44.2 mR/hr @ 1 meter on 02/15/91. Traceable to N.I.S.T.	± 1.5%

NRC License: 21-26253-01

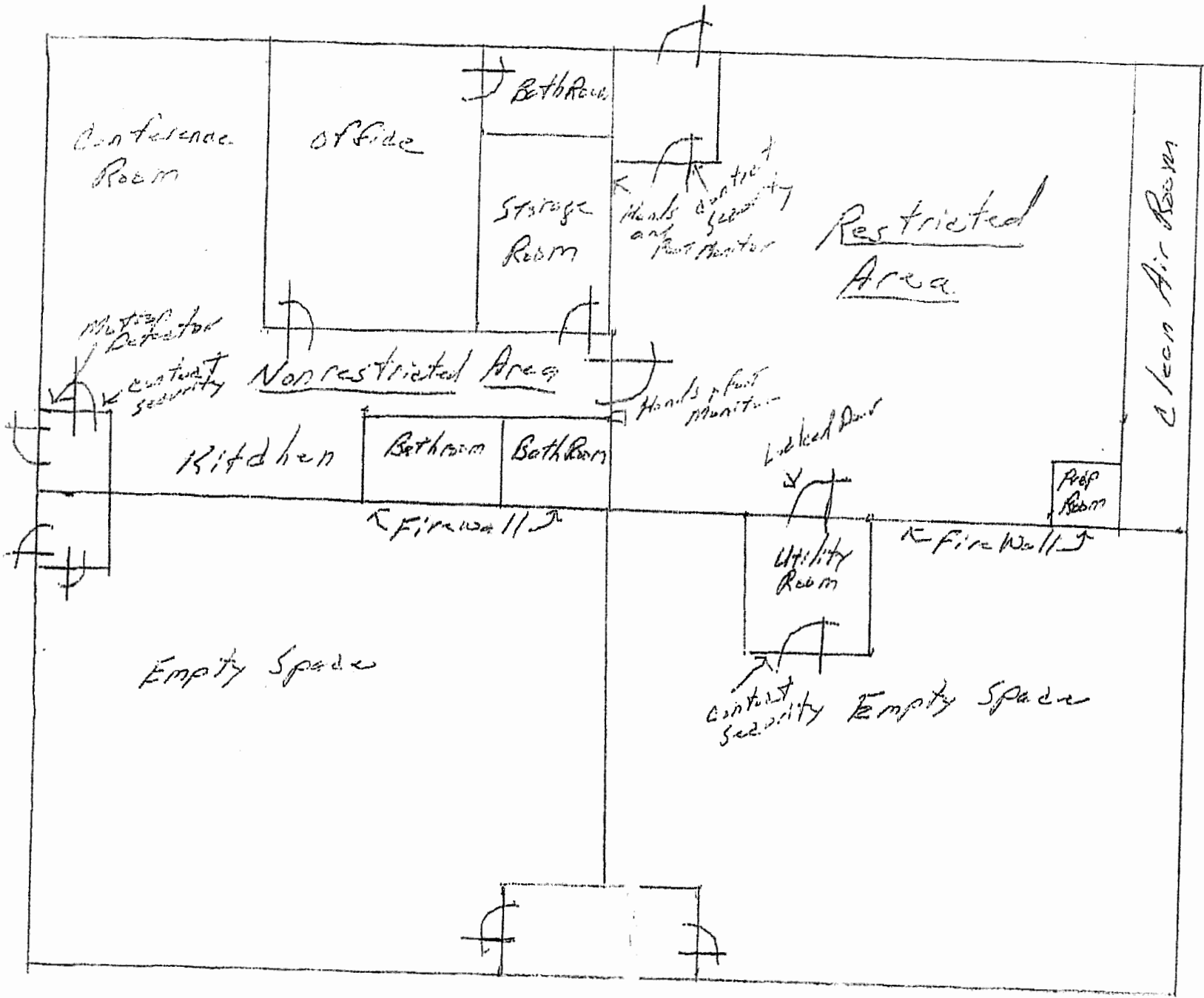
CALIBRATION DATA

Scale	Exposure (mR/hr)	Reading (mR/hr)	Exposure (mR/hr)	Reading (mR/hr)
x 1000	1500	1500	500	500
x 100	150	150	50	50
x 10	15	15	5	5
x 1	1.5	1.5	0.5	0.5
x 0.1	0.15	0.15	0.05	0.05

Battery Check: O.K.	Dedicated Source Check: 0.6 mR/hr
Comments: <i>Ray A. Carlson</i>	<i>Meter A</i> <i>1-15-17</i>
Calibrated By: Ray A. Carlson, M.S.	Date: January 16, 2017



Full Building Floor Plan



W
S—|—N

Area Wipe Report

Lakeview Diagnostic
36211 Jefferson Ave
Harrison Twp, MI 48045
21-32817-01MD EXP 05-31-2021

Wipe Area >= 100cm²

Group: Restricted Area		Description: Restricted Area					Background	0 Count(s) =>	0 CPM
Date: 01/11/2018	Time: 12:00	Name: David Schmitt - (DS)				Calibration Date: 02/15/2016	Efficiency: 28.496 %	Count Time: 1.00 min(s)	
Meter: Caprac Well Counter A	Mfr: Capintec	Mdl: Caprac	S/N: 002234						
Probe: Caprac Attached Well	Mfr: Capintec	Mdl: Caprac Well	S/N: 002234						
Item Name	Interval Count	Gross CPM Value	Net CPM Value	Net DPM Value	Trigger Limit DPM	Notes		Pass/Fail	
Carts	0	0	0	0	200.00			Pass	
CRV Interiors	0	0	0	0	200.00			Pass	
Disposal Area	0	0	0	0	200.00			Pass	
Door to Office	0	0	0	0	200.00			Pass	
DOT Phone	0	0	0	0	200.00			Pass	
Fax/Printer Phone	0	0	0	0	200.00			Pass	
Generator Storage	0	0	0	0	200.00			Pass	
Hot Pot	0	0	0	0	200.00			Pass	
Pass Through Boxes	0	0	0	0	200.00			Pass	
Prep Room	0	0	0	0	200.00			Pass	
Quality Control	0	0	0	0	200.00			Pass	
Refrigerator	0	0	0	0	200.00			Pass	
Shipment Receipt	0	0	0	0	200.00			Pass	

TEST COMMENTS:

PASSED

Also Floors, Walls have been wiped. Results are

TEST DATA: *No action*

Performed by: *David Schmitt* RSO Signature: *all below background*

Licensee: Lakeview Diagnostic

Registration: 21-32817-01MD EXP 05-31-2021

Area Wipe Report

Lakeview Diagnostic
36211 Jefferson Ave
Harrison Twp, MI 48045
21-32817-01MD EXP 05-31-2021

Wipe Area >= 100cm²

Group: Non-Restricted Area		Description: Non-Restricted Area					Background		0 Count(s) =>	0 CPM
Date:	Time:	Name:	Mdl:	S/N:	Calibration Date:	Efficiency:	Count Time:			
01/11/2018	12:01	David Schmitt - (DS)	Caprac	002234	02/15/2016	28.496 %	1.00 min(s)			
Meter: Caprac Well Counter A	Mfr: Capintec	Mdl: Caprac	S/N: 002234	Calibration Date: 02/15/2016						
Probe: Caprac Attached Well	Mfr: Capintec	Mdl: Caprac Well	S/N: 002234							
Item Name	Interval Count	Gross CPM Value	Net CPM Value	Net DPM Value	Trigger Limit DPM	Notes	Pass/Fail			
Barb's Desk	0	0	0	0	200.00		Pass			
Dave's Office Door	0	0	0	0	200.00		Pass			
Front Doors	0	0	0	0	200.00		Pass			
Front Office Counter	0	0	0	0	200.00		Pass			
Men's Bathroom	0	0	0	0	200.00		Pass			
Woman's Bathroom	0	0	0	0	200.00		Pass			

TEST COMMENTS:

Floor & Walls also wiped and results below Background

PASSED

TEST DATA:

Performed by:

David Schmitt
David Schmitt
21-32817-01MD EXP 05-31-2021

RSO Signature:

David Schmitt

Licensee:

Lakeview Diagnostic

Registration:

21-32817-01MD EXP 05-31-2021

Area Survey Report

Lakeview Diagnostic
36211 Jefferson Ave
Harrison Twp, MI 48045
21-32817-01MD EXP 05-31-2021

Group: Restricted Area

Description: Restricted Area

Date: 01/11/2018 Time: 11:58

Name: David Schmitt - (DS)

Meter: 14C #192017 A

Mfr: Ludlum

Mdl: 14C

S/N: 192017

Calibration Date: 01/16/2017

Background

0.02 mR/hr

Probe: 44-6 PR266585

Mfr: Ludlum

Mdl: 44-6

S/N: PR266585

Efficiency: 100.00

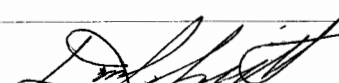
Item Name	Gross Value	Net Value	Corrected Value	Trigger Limit	Notes
Carts	0.05 mR/hr	0.03 mR/hr	0.03 mR/hr	0.20 mR/hr	Pass
CRV Interiors	0.05 mR/hr	0.03 mR/hr	0.03 mR/hr	0.20 mR/hr	Pass
Disposal Area	0.05 mR/hr	0.03 mR/hr	0.03 mR/hr	0.20 mR/hr	Pass
Door to Office	0.05 mR/hr	0.03 mR/hr	0.03 mR/hr	0.20 mR/hr	Pass
DOT Phone	0.05 mR/hr	0.03 mR/hr	0.03 mR/hr	0.20 mR/hr	Pass
Fax/Printer Phone	0.05 mR/hr	0.03 mR/hr	0.03 mR/hr	0.20 mR/hr	Pass
Generator Storage	0.05 mR/hr	0.03 mR/hr	0.03 mR/hr	0.20 mR/hr	Pass
Hot Pot	0.05 mR/hr	0.03 mR/hr	0.03 mR/hr	0.20 mR/hr	Pass
Pass Through Boxes	0.05 mR/hr	0.03 mR/hr	0.03 mR/hr	0.20 mR/hr	Pass
Prep Room - Counter/Faucet Handles	0.05 mR/hr	0.03 mR/hr	0.03 mR/hr	0.20 mR/hr	Pass
Quality Control	0.05 mR/hr	0.03 mR/hr	0.03 mR/hr	0.20 mR/hr	Pass
Refrigerator	0.05 mR/hr	0.03 mR/hr	0.03 mR/hr	0.20 mR/hr	Pass
Shipment Receipt	0.05 mR/hr	0.03 mR/hr	0.03 mR/hr	0.20 mR/hr	Pass

TEST COMMENTS:

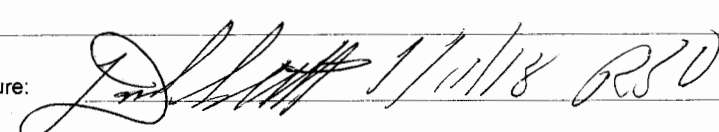
PASSED

TEST DATA:

Performed by:


David Schmitt

RSO Signature:

 1/11/18 RSO

Licensee:

Lakeview Diagnostic

Registration:

21-32817-01MD EXP 05-31-2021

Area Survey Report

Lakeview Diagnostic
36211 Jefferson Ave
Harrison Twp, MI 48045
21-32817-01MD EXP 05-31-2021

Group: Non-restricted Area

Description: Non-restricted Area

Date: 01/11/2018 Time: 12:00 Name: David Schmitt - (DS)
Meter: 14C #192017 A Mfr: Ludlum Mdl: 14C S/N: 192017 Calibration Date: 01/11/2017 Background 0.02 mR/hr
Probe: 44-6 PR266585 Mfr: Ludlum Mdl: 44-6 S/N: PR266585 Efficiency: 100.00

Item Name	Gross Value	Net Value	Corrected Value	Trigger Limit	Notes
Barb's Desk	0.02 mR/hr	0.00 mR/hr	0.00 mR/hr	0.20 mR/hr	Pass
Dave's Office Door	0.02 mR/hr	0.00 mR/hr	0.00 mR/hr	0.20 mR/hr	Pass
Front Doors	0.02 mR/hr	0.00 mR/hr	0.00 mR/hr	0.20 mR/hr	Pass
Front Office Counter	0.02 mR/hr	0.00 mR/hr	0.00 mR/hr	0.20 mR/hr	Pass
Men's Bathroom	0.02 mR/hr	0.00 mR/hr	0.00 mR/hr	0.20 mR/hr	Pass
Woman's Bathroom	0.02 mR/hr	0.00 mR/hr	0.00 mR/hr	0.20 mR/hr	Pass

TEST COMMENTS:

PASSED


TEST DATA:

Performed by:



David Schmitt

RSO Signature:



Licensee:

Lakeview Diagnostic

Registration:

21-32817-01MD EXP 05-31-2021

Inventory of Sealed Sources

Lakeview Diagnostic

36211 Jefferson Ave

Harrison Twp, MI 48045

21-32817-01MD EXP 05-31-2021

Location: Lakeview Diagnostic Nuclear Pharmacy
36211 Jefferson
Harrison Township, Michigan 48045

Performed By: David Schmitt
Date: 01/11/2018
Time: 10:33

Sealed Source	Activity	Accounted For
Manufacturer: Eckert & Ziegler Product: Ba-133 Source Serial Number: 1490-8-17 Next Leak Test: 07/11/2018	246.600 uCi On: 02/01/2011 Location Stored: Clean Room	Accounted For Decayed Act.: 155.920 uCi
Manufacturer: Eckert & Ziegler Product: Cs-137 Source Serial Number: 1461-27-4 Next Leak Test: 07/11/2018	198.800 uCi On: 02/01/2011 Location Stored: Clean Room	Accounted For Decayed Act.: 169.510 uCi
Manufacturer: Eckert & Ziegler Product: Co-57 Source Serial Number: 1485-26-3 Next Leak Test: 11/24/2011	0.106 uCi On: 02/01/2011 Location Stored: Clean Room	Accounted For Decayed Act.: 0.000 uCi
Manufacturer: Eckert & Ziegler Product: Ba-133 Source Serial Number: 1377-28-8 Next Leak Test: 11/24/2011	0.108 uCi On: 02/01/2011 Location Stored: Clean Room	Accounted For Decayed Act.: 0.068 uCi
Manufacturer: Eckert & Ziegler Product: Cs-137 Source Serial Number: 1438-28-8 Next Leak Test: 04/28/2012	0.103 uCi On: 01/01/2011 Location Stored: Lead Canister in main Lab	Accounted For Decayed Act.: 0.088 uCi
Manufacturer: North American Scientific Product: Ba-133 Source Serial Number: 33837 Next Leak Test: 07/11/2018	263.500 uCi On: 03/01/2003 Location Stored: Clean Air Room- Harrison Township	Accounted For Decayed Act.: 98.757 uCi
Manufacturer: Eckert & Ziegler Product: Ba-133 Source Serial Number: 32422 Next Leak Test: 10/29/2012	0.116 uCi On: 01/01/2003 Location Stored: Clean Air Room	Accounted For Decayed Act.: 0.043 uCi
Manufacturer: Eckert & Ziegler Product: Cs-137 Source Serial Number: 33753 Next Leak Test: 10/29/2012	0.113 uCi On: 03/01/2003 Location Stored: Clean Air Room	Accounted For Decayed Act.: 0.080 uCi
Manufacturer: North American Scientific Product: Cs-137 Source Serial Number: 32618 Next Leak Test: 07/11/2018	251.800 uCi On: 02/01/2003 Location Stored: Clean Air Room	Accounted For Decayed Act.: 178.687 uCi
Manufacturer: Eckert & Ziegler Product: Co-57 Source Serial Number: 1594-50-6 Next Leak Test: 03/07/2013	0.089 uCi On: 03/01/2013 Location Stored: Clean Air Room	Accounted For Decayed Act.: 0.001 uCi

David Schmitt 1/22/18

Wipe Meter Efficiency Test

Lakeview Diagnostic

36211 Jefferson Ave

Harrison Twp, MI 48045

21-32817-01MD EXP 05-31-2021

FACILITY NAME/ADDRESS:

Lakeview Diagnostic Nuclear Pharmacy
36211 Jefferson
Harrison Township, Michigan 48045
586-466-6260

DATE PERFORMED: 01/11/2018 10:04

NEXT DUE DATE: 04/11/2018

INSTRUMENT INFORMATION:

Model Number: Caprac
Manufacturer: Capintec
Serial Number: 002234

Capintec
002234

HV Setting: 1000.00 volts
Window: 0.0 keV to 1000.0 keV
Count Time: 1.00 mins

SOURCE INFORMATION:

Nuclide: Ba133
Source Type: Ba-133 Source
Manufacturer: Eckert & Ziegler

Serial Number: 32422
Calibration Amt: 0.116 uCi
Calibration D/T: 01/01/2003 00:00

Current Activity: 0.04286251 uCi / 95154 DPM

WIPE METER EFFICIENCY TEST DATA:

Measurement	Wipe (COUNTS)	Background (COUNTS)	NET (CPM)	Efficiency
1	89040	0	89040	93.575 %
2	90690	0	90690	95.309 %
3	89730	0	89730	94.30 %
Average	89820	0	89820	94.394 %

NOTES:

$NET_CPM = (Wipe_CPM - Background_CPM) / Count_Time$
 $Efficiency_Of_Meter = (NET_CPM / Current_DPM_Of_Known_Source) * 100$
 $DPM_Per_uCi = 2.22 * 10^6$
 $LLD = 4.65 * \sqrt{Background_Counts} + 3$
 $MDA = LLD / (Efficiency_Of_Meter * DPM_Per_uCi)$
If MDA is greater than 0.005 uCi, a longer count time is required

Minimum Detectable Activity (MDA)

Value	Results
LLD	3.00 CPM
MDA	0.000001 uCi

TEST COMMENTS:

TEST DATA:

Performed by:

David Schmitt
RSO

RSO Signature:

Licensee: Lakeview Diagnostic
Registration: 21-32817-01MD EXP 05-31-2021

Prepared by: David Schmitt

Printed: 1/18/2018 10:12:58 AM Wipe Meter Efficiency Test ID: 88

Page: 1

Wipe Meter Efficiency Test

Lakeview Diagnostic

36211 Jefferson Ave
Harrison Twp, MI 48045
21-32817-01MD EXP 05-31-2021

FACILITY NAME/ADDRESS:
Lakeview Diagnostic Nuclear Pharmacy
36211 Jefferson
Harrison Township, Michigan 48045
586-466-6260

DATE PERFORMED: 01/11/2018 10:14

NEXT DUE DATE: 04/11/2018

INSTRUMENT INFORMATION:

Model Number: Caprac
Manufacturer: Capintec
Serial Number: 002234

Capintec
002234

HV Setting: 1000.00 volts
Window: 0.0 keV to 1000.0 keV
Count Time: 1.00 mins

SOURCE INFORMATION:

Nuclide: Cs137
Source Type: Cs-137 Source
Manufacturer: Eckert & Ziegler

Serial Number: 1438-28-8
Calibration Amt: 0.103 uCi
Calibration D/T: 01/01/2011 00:00

Current Activity: 0.0880793 uCi / 195536 DPM

WIPE METER EFFICIENCY TEST DATA:

Measurement	Wipe (COUNTS)	Background (COUNTS)	NET (CPM)	Efficiency
1	54670	0	54670	27.959 %
2	54710	0	54710	27.98 %
3	55130	0	55130	28.194 %
Average	54836	0	54836	28.044 %

NOTES:

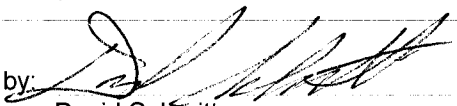
Minimum Detectable Activity (MDA)

$NET_CPM = (Wipe_CPM - Background_CPM) / Count_Time$
 $Efficiency_Of_Meter = (NET_CPM / Current_DPM_Of_Known_Source) * 100$
 $DPM_Per_uCi = 2.22 * 10^6$
 $LLD = 4.65 * Sqrt(Background_Counts) + 3$
 $MDA = LLD / (Efficiency_Of_Meter * DPM_Per_uCi)$
If MDA is greater than 0.005 uCi, a longer count time is required

Value	Results
LLD	3.00 CPM
MDA	0.000005 uCi

TEST COMMENTS:

TEST DATA:

Performed by: 
David Schmitt
rso
Licensee: Lakeview Diagnostic
Registration: 21-32817-01MD EXP 05-31-2021

RSO Signature: 

Prepared by: David Schmitt

Printed: 1/18/2018 10:17:18 AM Wipe Meter Efficiency Test ID: 89

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Sealed Source Leak Test

Lakeview Diagnostic

36211 Jefferson Ave

Harrison Twp, MI 48045

21-32817-01MD EXP 05-31-2021

FACILITY NAME/ADDRESS:

Lakeview Diagnostic Nuclear Pharmacy
36211 Jefferson
Harrison Township, Michigan 48045
586-466-6260

DATE PERFORMED: 01/11/2018 10:23

NEXT DUE DATE: 07/11/2018

INSTRUMENT INFORMATION:

Model Number: Caprac
Manufacturer: Capintec
Serial Number: 002234

Efficiency: 94.394 %
Action Limit: 0.005 uCi

SOURCE INFORMATION:

Nuclide: Ba133
Source Type: Ba-133 Source
Manufacturer: Eckert & Ziegler

Serial Number: 1490-8-17
Calibration Amt: 246.60 uCi
Calibration D/T: 02/01/2011 00:00
Decayed Act.: 155.92 uCi

LEAK TEST DATA:

Measurement	Wipe (CPM)	Background (CPM)	NET (CPM)	NET (DPM)	NET (uCi)	PASS/FAIL
1	5	0	5	5	0.0000024	PASS
2	3	0	3	3	0.0000014	PASS
3	7	0	7	7	0.0000033	PASS
Average	5	0	5	5	0.0000024	PASS

NOTES:

NET (CPM) = Wipe (CPM) - Background (CPM)

NET (DPM) = NET (CPM) / Efficiency

NET (uCi) = NET (DPM) / 2.2×10^6 DPM/uCi

If leak test results are greater than 0.005 uCi of removable contamination, the source is to be removed from use.

PASSED

TEST COMMENTS: PASSED

TEST DATA:

Performed by:

David Schmitt

rso

Licensee: Lakeview Diagnostic

Registration: 21-32817-01MD EXP 05-31-2021

RSO Signature:

Prepared by: David Schmitt

Printed: 1/18/2018 10:25:48 AM

Sealed Source Leak Test ID: 44

Page: 1

Sealed Source Leak Test

Lakeview Diagnostic

36211 Jefferson Ave

Harrison Twp, MI 48045

21-32817-01MD EXP 05-31-2021

FACILITY NAME/ADDRESS:

Lakeview Diagnostic Nuclear Pharmacy
36211 Jefferson
Harrison Township, Michigan 48045
586-466-6260

DATE PERFORMED: 01/11/2018 10:26

NEXT DUE DATE: 07/11/2018

INSTRUMENT INFORMATION:

Model Number: Caprac
Manufacturer: Capintec
Serial Number: 002234

Efficiency: 94.394 %
Action Limit: 0.005 uCi

SOURCE INFORMATION:

Nuclide: Ba133
Source Type: Ba-133 Source
Manufacturer: North American Scientific

Serial Number: 33837
Calibration Amt: 263.50 uCi
Calibration D/T: 03/01/2003 12:00
Decayed Act.: 98.757 uCi

LEAK TEST DATA:

Measurement	Wipe (CPM)	Background (CPM)	NET (CPM)	NET (DPM)	NET (uCi)	PASS/FAIL
1	10	0	10	10	0.0000048	PASS
2	8	0	8	8	0.0000038	PASS
3	4	0	4	4	0.0000019	PASS
Average	7	0	7	7	0.0000033	PASS

NOTES:

NET (CPM) = Wipe (CPM) - Background (CPM)

NET (DPM) = NET (CPM) / Efficiency

NET (uCi) = NET (DPM) / 2.2×10^6 DPM/uCi

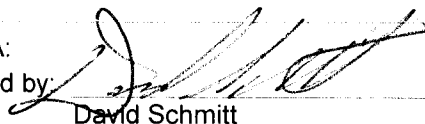
If leak test results are greater than 0.005 uCi of removable contamination, the source is to be removed from use.

PASSED

TEST COMMENTS: PASSED

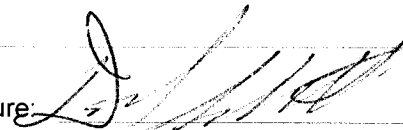
TEST DATA:

Performed by:


David Schmitt

RSO

RSO Signature:



Licensee: Lakeview Diagnostic

Registration: 21-32817-01MD EXP 05-31-2021

Prepared by: David Schmitt

Printed: 1/18/2018 10:27:57 AM

Sealed Source Leak Test ID: 45

Page: 1

Sealed Source Leak Test

Lakeview Diagnostic

36211 Jefferson Ave

Harrison Twp, MI 48045

21-32817-01MD EXP 05-31-2021

FACILITY NAME/ADDRESS:
Lakeview Diagnostic Nuclear Pharmacy
36211 Jefferson
Harrison Township, Michigan 48045
586-466-6260

DATE PERFORMED: 01/11/2018 10:29

NEXT DUE DATE: 07/11/2018

INSTRUMENT INFORMATION:

Model Number: Caprac
Manufacturer: Capintec
Serial Number: 002234

Efficiency: 28.044 %
Action Limit: 0.005 uCi

SOURCE INFORMATION:

Nuclide: Cs137
Source Type: Cs-137 Source
Manufacturer: North American Scientific

Serial Number: 32618
Calibration Amt: 251.80 uCi
Calibration D/T: 02/01/2003 00:00
Decayed Act.: 178.687 uCi

LEAK TEST DATA:

Measurement	Wipe (CPM)	Background (CPM)	NET (CPM)	NET (DPM)	NET (uCi)	PASS/FAIL
1	50	0	50	178	0.0000803	PASS
2	42	0	42	149	0.0000675	PASS
3	22	0	22	78	0.0000353	PASS
Average	38	0	38	135	0.000061	PASS

NOTES:

NET (CPM) = Wipe (CPM) - Background (CPM)

NET (DPM) = NET (CPM) / Efficiency

NET (uCi) = NET (DPM) / 2.2×10^6 DPM/uCi

If leak test results are greater than 0.005 uCi of removable contamination, the source is to be removed from use.

PASSED

TEST COMMENTS: PASSED

TEST DATA:

Performed by:

David Schmitt
RSO

RSO Signature:

Licensee:

Lakeview Diagnostic

Registration:

21-32817-01MD EXP 05-31-2021

Prepared by: David Schmitt

Printed: 1/18/2018 10:30:27 AM

Sealed Source Leak Test ID: 46

Page: 1

Sealed Source Leak Test

Lakeview Diagnostic

36211 Jefferson Ave

Harrison Twp, MI 48045

21-32817-01MD EXP 05-31-2021

FACILITY NAME/ADDRESS:
Lakeview Diagnostic Nuclear Pharmacy
36211 Jefferson
Harrison Township, Michigan 48045
586-466-6260

DATE PERFORMED: 01/11/2018 10:31

NEXT DUE DATE: 07/11/2018

INSTRUMENT INFORMATION:

Model Number: Caprac
Manufacturer: Capintec
Serial Number: 002234

Efficiency: 28.044 %
Action Limit: 0.005 uCi

SOURCE INFORMATION:

Nuclide: Cs137
Source Type: Cs-137 Source
Manufacturer: Eckert & Ziegler

Serial Number: 1461-27-4
Calibration Amt: 198.80 uCi
Calibration D/T: 02/01/2011 00:00
Decayed Act.: 169.51 uCi

LEAK TEST DATA:

Measurement	Wipe (CPM)	Background (CPM)	NET (CPM)	NET (DPM)	NET (uCi)	PASS/FAIL
1	15	0	15	53	0.0000241	PASS
2	22	0	22	78	0.0000353	PASS
3	18	0	18	64	0.0000289	PASS
Average	18	0	18	65	0.0000289	PASS

NOTES:

NET (CPM) = Wipe (CPM) - Background (CPM)

NET (DPM) = NET (CPM) / Efficiency

NET (uCi) = NET (DPM) / 2.2×10^6 DPM/uCi

If leak test results are greater than 0.005 uCi of removable contamination, the source is to be removed from use.

PASSED

TEST COMMENTS: PASSED

TEST DATA:

Performed by:

David Schmitt
RSO

RSO Signature:

Licensee:

Lakeview Diagnostic

Registration:

21-32817-01MD EXP 05-31-2021

Prepared by: David Schmitt

Printed: 1/18/2018 10:32:19 AM

Sealed Source Leak Test ID: 47


Page: 1

Lakeview Diagnostic Shipment Report

Customer #: 00035 **Delivery Date/Time:** 01/11/2018 14:00 **Box:** 001 **Ship Container:** 1
Actual Shipment Date/Time: 01/11/2018 13:32

Sender:
 Lakeview Diagnostic
 36211 Jefferson Ave
 Harrison Twp, MI 48045
 (586) 466-6260

Receiver:
 HeartLight Pharmacy Services
 1331 N. Cole Street
 Lima, Ohio 45801
 866-443-2785


 Shipment Report ID: 24579

BILL OF LADING

UN2915, Radioactive material, Type A package, 7

RX. #	Product	Cal. Date/Time	Total Amount	Volume/Quantity	Activity at Time of Shipment	Isotope	Chemical / Physical Form
131582	Ba-133 Source	01/11/2018 15:00	0.00 mCi	2.72 mg	0.00 GBq (0.00 mCi)	Ba133	solid
131580	Ba-133 Source	01/11/2018 15:00	0.098 mCi	0.628 mg	0.0036 GBq (0.098 mCi)	Ba133	solid
131587	Co-57 Source	01/11/2018 15:00	0.00 mCi	113.69 mg	0.00 GBq (0.00 mCi)	Co57	solid
131585	Cs-137 Source	01/11/2018 15:00	0.00 uCi	0.40 mg	0.00 GBq (0.00 mCi)	Cs137	solid
131583	Cs-137 Source	01/11/2018 15:00	0.169 uCi	0.40 mg	0.00 GBq (0.000 mCi)	Cs137	solid
131581	Ba-133 Source	01/11/2018 15:00	0.00 mCi	0.40 mg	0.00 GBq (0.00 mCi)	Ba133	solid
131579	Ba-133 Source	01/11/2018 15:00	0.155 mCi	2269.7 mg	0.0057 GBq (0.155 mCi)	Ba133	solid
131588	Co-57 Source	01/11/2018 15:00	0.00 mCi	552.71 mg	0.00 GBq (0.00 mCi)	Co57	solid
131586	Cs-137 Source	01/11/2018 15:00	0.178 uCi	2.236 mg	0.00 GBq (0.000 mCi)	Cs137	solid
131584	Cs-137 Source	01/11/2018 15:00	0.00 uCi	0.00 mg	0.00 GBq (0.00 mCi)	Cs137	solid

DOT Label: RADIOACTIVE WHITE I **Total Activity at Shipping:** 0.0094 GBq **(0.2533 mCi)**

Trans. Index at 1 Meter: N/A

This is to certify that the above-named materials are properly classified, described, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Survey Meter Serial #: 192017
Background (mR/hr): 0.02
Surface Reading (mR/hr): 0.02
One Meter Reading (mR/hr): 0.02
Condition of Container: Good

Wipe Test Instrument Serial #: 002234
Background (CPM): 0
Surface (CPM): 0
Surface NET (DPM): 0.00
Area (cm²): 100.00

RECEIPT SECTION

Type of Package Received: NONE WHITE I YELLOW II YELLOW III
 Survey Meter Serial #: _____ Wipe Test Instrument Serial #: _____
 Background (mR/hr): _____ Background (CPM): _____
 Surface Reading (mR/hr): _____ Surface (CPM): _____
 Trans. Index at 1 Meter: _____ Surface (DPM): _____
 Condition of Container: _____ Area (cm²): _____
Received By: _____ **Date:** _____ **Time:** _____

RETURN TO SENDER/DISPOSAL SECTION (to be performed by the customer - DOT Requirement)

Returned To: Lakeview Diagnostic
 No point on surface exceeds 0.5 mR/hr
 Removable Surface Contamination < 22 DPM/cm²
 Contents meet the activity requirements for "Limited Quantity" return
Returned By: _____ **Date:** _____ **Time:** _____
Picked Up By: _____ **Date:** _____ **Time:** _____

HAZARDOUS MATERIAL SHIPPING DOCUMENT

Transporter : Toledo
1301 E. Alexis,
Toledo, OH 43612
(419) 729-8005
Permit Number:

For Stericycle Customer Care
Call 1-866-782-7422
Stericycle Customer # 2060491
Site # 001

Lakeview Diagnostic LLC
36211 Jefferson Ave
Harrison Township, MI 480452906
REGULATORY #:
Phone #: (586) 466-6260
Contact : David Schmitt

SERVICE DATE: 10/20/2017

SHIPPING DOCUMENT #: MDTDOOHPEI

MDTDOOHPEI

MDTDOOHPEI

UN3291, Regulated Medical Waste, N.O.S., 5.2, P011

For DOT HAZMAT Emergency Response Call:

CHEMTREC 1-800-424-9300

Customer No. 21132

TOTAL CONTAINERS COLLECTED: 5

TOTAL VOLUME COLLECTED: 21.500 CU FT

SUMMARY (Cont. Type)	QTY	VOL CF
WS43 4.3 CF Medium Box Disposal	5	21.500

00A0090 WS43 00A0092 WS43 00A0092 WS43
00A0091 WS43 00A0093 WS43

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

barbara riedel



Generators Signature

Transporter Certification: Patrick McGuire

Pe McRw

Transporter Signature

THIS IS A THROUGH SHIPMENT

Local Trans Center
Toledo-Toledo, OH

DESTINATION FACILITY:

Incinerate
Stericycle Inc.-Warren, OH

Dental
Stericycle Inc.-Dunkirk, NY

Pharma
Stericycle Inc.-Warren, OH

Standard
Stericycle Inc.-Toledo, OH

DATE OF RECEIPT AT
TREATMENT FACILITY: ____/____/____

DELIVERY DOCUMENT #: EDTDGGHPFI

TOTAL DELIVERED ITEMS: 5

ITEM	QTY
4.3 CF Medium Box Disposal	5

DRIVER: Patrick McGuire

FREQUENCY: Every 12 Weeks

NEXT PICKUP: 11/24/2017

CUSTOMER SERVICE: 4197298005

Thank you for choosing Stericycle

ATTACHMENT II

PHARMACY: Radioactive Waste Storage & Disposal Log

Opening Containers

1. Assign container next sequential number.
2. Enter Group Code and date opened. (See Group Code at right).
3. Complete Radioactive Waste Container Label and place in plastic envelope.

Closing Containers

1. When container is full, put lid in place, attach label to lid, enter date on label and in log.
2. Use calendar and table at right to determine approximate disposal date. Enter in:
Do Not Dispose Before Space

Disposing Containers

1. When storage period is over, survey the container and record results.
2. If survey doesn't exceed background, perform a wipe test on the exterior of the container.
3. Dispose of container or place in holding area for licensed waste hauler pickup.
(See Attachment II for detailed instructions).

Group Code	Isotope	Decay Time
A	Tc ^{99m}	3 Days
C	Tl ²⁰¹ Ga ⁶⁷ , In ¹¹¹ I ¹²³ , Re ¹⁸⁶ Xe ¹³³ , I ¹³¹	90 Days <i>MO 99 120 days Gen-186-215</i>
D	p ³² , Cr ⁵¹ , I ¹²⁵ , Sr ⁸⁹	2 Years
E	Co ⁵⁷	7.5 Years

2060491-001

Container Number	Group Code	Date Opened	Date Closed	Do Not Dispose Before	SURVEY INFORMATION							Disposal Date	Method of Disposal
					Survey mR/hr	Background mR/hr	Survey Meter Number	Wipe DPM	Date	By			
00A0092	C	3/26/15	7/10/17	10/15/17	0.05	0.02	B	⊖	10/5/17	BR	10/20/17	1	
00A0093	C	6/8/2011	6/6/19	10/6/17	0.05	0.02	B	⊖	10/20/17	BR	10/20/17	1	

Action Levels:

- a. Radiation Level: Any reading over background
- b. Contamination Level: 220 dpm/100cm²

Instrument Used for Wipe Test:

Method of Disposal Codes: 1 = Pickup by waste hauler
2 = Placed in cold trash

RSO Review RS1

All containers are wipe tested prior to removal from restricted area. Containers are decontaminated if net wipe exceeds 220 dpm/100 cm²

LAKEVIEW DIAGNOSTIC, L.L.C.

36211 Jefferson Avenue
Harrison Township, MI 48045



1004



80532

U.S. POSTAGE
PAID
PORT HURON, MI
48081
JAN 26 18
AMOUNT
\$7.15
R2304E105407-07

PRIORITY
★ MAIL ★

TRACKED
★ ★ ★
INSURED
★



For Domestic and International Use

Label 1079, May 2014

Expected Delivery Day: 01/29/2018
USPS TRACKING NUMBER



9505 5121 2503 8026 1893 23

RECEIVED JAN 30 2018

Materials Licensing Section
U.S. Nuclear Regulatory Commission, Region III
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352