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August 10, 2015

Licensing Assistance Team
Division of Nuclear Materials Safety
U.S. Nuclear Regulatory Commission, Region I
2100 Renaissance Blvd., Suite 100
King of Prussia, PA 19406-2719

03001250

REC RG 1 08 17 15 AM 07:47

Re: Request for amendment of License No. 06-02388-01

The Hospital of Central Connecticut is requesting the following amendment to our NRC license: Removal of the Varian HDR unit and the release for unrestricted use of 5 Highland Street, New Britain, CT 06050.

On May 12, 2015, the NRC granted approval of the clinical use of a Nucletron HDR unit at 183 North Mountain Road, New Britain CT. Since all clinical activities have been relocated to this new address we are formally requesting that all activities involving the use of radioactive material at our previous address of 5 Highland Street be removed from our license. To that end, please remove the Varian HDR unit (Varian Medical Systems, Inc. Model GammaMed 232) from our license. The final Varian HDR source was prepared for shipment back to the vendor on July 21, 2015 (see attached Varian Field Service Report). The source was received by AOS labs on July 30, 2015 (see attached receipt of material). There is no longer any radioactive material located at the 5 Highland Street, New Britain address.

SURVEY RESULTS

In support of our request to release this area for unrestricted use as per 10 CFR 20.1402 confirmatory surveys have been performed and included for your review. All measurements were shown to be consistent with background levels (see Table 1 for details).

Table 1: Survey results in support of releasing 5 Highland Street for unrestricted use.

Area	Location	Survey Results * (μ R/hr)	Wipe Test Results ** (dpm)
HDR Unit	External Casing	Not Distinguishable from Background	0.0
	Internal Components		1.5
	Inside the Shielding		0.0
HDR Storage Closet	Floor		0.0
	Storage Rack		0.0
	Emergency "Lead Pig"		3.1
	Quality Assurance Equipment		4.6
Treatment Vault	Floor		0.0
	Treatment Couch		0.0
	Counter Tops		0.0
	Linear Accelerator		0.0
	Cabinets		0.0
Hot Lab	Floor		20.0
	Counter Tops		0.0
	Cabinets		0.0

- * Surveys were performed using a Fluke 451P-RYR survey meter. Background measurements were found to be 20 μ R/hr. Values reported are net values.
- ** Wipe Test Results were performed using a Capintec Capus 3000. Background measurements were found to be 479 counts per minute (cpm). Values reported are net values.

POSTINGS

All required regulatory postings indicating "Radioactive Materials", "Caution Radiation Area", NRC Form 3 and Emergency Contact Information have been removed from the 5 Highland Street location.

ATTACHMENTS

- Varian Field Service Report for source shipment
- AOS source receipt
- Wipe Test Analysis Results to evaluation potential residual contamination

Should you have any technical questions regarding this amendment request, please feel free to contact, George Pavlonnis, AMP at george.pavlonnis@hhchealth.org or (860) 331-9379.

Sincerely,



Kristoffer Popovitch, RT(R), MBA
Oncology Regional Director – The Hospital of Central Connecticut
Hartford Healthcare Cancer Institute
Kristoffer.popovitch@hhchealth.org



SERVICE REPORT

FSR #
H87715-DBOS-9YLHWW

660 N. McCarthy Blvd
Milpitas CA 95035
USA

Notification No.		PO Number	0000677048
Request Date	7/20/15	Event Date	7/20/15
Field Engineer	BOYLES, DOUG	Assisted FE	
Customer	THE HOSPITAL OF CENTRAL CONNECTICUT; NEW BRITAIN GENERAL CAMPUS; 5 HIGHLAND ST; NEW BRITAIN CT; US 06050		
Equipment ID	H64F192	Equipment Name	GAMMAMED PLUS IX
Notification Equipment ID		Notification Equipment Name	

Reason for Call

Machine decommissioning

High Voltage Hours

Heater Hours

Corrective Action Comments

Performed Decommission to include all testing, verification and calibration of all system components. All system operations passed without any noted failures.
 Removed source: 24-01-3563-001-021215-11295-33
 Source cycles: 26
 Dummy cycles: 2086
 Source Drive cycles: N/A
 Dummy Drive cycles: N/A
 Wipe test results were negative.
 FedEx # for source return: 801982229898

Times on site

Request Date	Time In	Time Out	Hours
07/20/2015	11:30 AM	12:30 PM	1.00
Total Non-Chargeable hours	Total Travel Hours	Total Work hours	Total Site Hours
0.00	3.00	1.00	1.00

Equipment serviced

Sub-Equipment	System	Sub-system	Request Date	Hours	Activity
H64F192-GM	Travel In	Travel In	07/20/2015	1.50	Travel
H64F192-GM	22 Source Exchan	00 Source Remova	07/20/2015	1.00	Service
H64F192-GM	Travel Out	Travel Out	07/20/2015	1.50	Travel

Equipment Released

07/20/2015 12:30 PM

Customer Signature

FE Signature

Customer is responsible for all calibration verification

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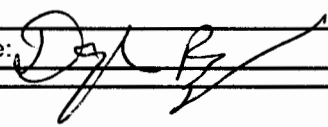
Hospital / Clinic / Institute	AL Serial #	Date
THE HOSPITAL OF CENTRAL CONNECTICUT	H64F192-GM	20-Jul-15

Old Source Serial #	24-01-3563-001-021215-11295-33	Active Cycles	76 / 1102
New Source Serial #	N/A	Dummy Cycles	2086 / 2093

Radiation Monitor Details	Survey Meter	Wipe Tester
Make / Model Number	Ludlum 2401-EW	Ludlum 2401-EW
Serial No.	212467	212467
Calibration Expiry Date	12/3/2015	12/3/2015

Test Description	Value	Maximum	Units	Measure Point
Background Wipe of Treatment Room	0	N/A	CPS Bq (1)	1-2 mm
Survey Afterloader Shielding – Old Source (all surfaces in 5 cm distance)	5	100	μSv / h	5 cm
Wipe Shipping Container – New Source	N/A	2 x Background	CPS Bq (1)	1-2 mm
Survey Shipping Container – New Source (top, sides, bottom)	N/A	2000	μSv / h	Surface
Wipe New Source (after uncoiling from inside container)	N/A	2 x Background	CPS Bq (1)	1-2 mm
Survey Afterloader Shielding – New Source EB (all surfaces in 5 cm distance)	0	100	μSv / h	5 cm
Survey Afterloader Indexer Plate – New Source EB (in front of channel 12/13 in 5 cm distance)	0	100	μSv / h	5 cm
Survey Afterloader Shielding – New Source JB (all surfaces in 100 cm distance)	0	10	μSv / h	1 m
Wipe Old Source (unloaded)	0	2 x Background	CPS Bq (1)	1-2 mm
Wipe Transport Safe Connector	N/A	2 x Background	CPS Bq (1)	1-2 mm
Wipe Shipping Container – Old Source	0	2 x Background	CPS Bq (1)	1-2 mm
Survey Shipping Container – Old Source (top, sides, bottom)	45	700	μSv / h	Surface
Shipping Container TI-Old Source (2)	0.2	N/A	T.I.	N/A

Source Activity On Day Of Installation	N/A Ci.
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Service Engineer:	Name: Doug Boyles, FSE	Signature: 
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- 1) Delete units as appropriate.
 (1) The absolute radiation contamination limit is 4 Bq/cm² or 220 dpm/cm² (based on a 300 cm² wipe).

If a radiation wipe or survey is above the acceptable limit:

- Lock the wire in the shipping container.
- Lock the treatment room door.
- Contact the customer RSO.
- Contact your manager, your RSO and VBT PSE.

- (2) Transport Index (T.I.) = Maximum radiation dose rate (μSv/h) measured at 1 m from package surface, divided by 10.

FedEx Express Package **US Airbill**

FedEx Tracking Number

8019 8222 9898

Form ID No. **0215**

MUR4

From *Please print and press hard.*

Date **7/20/15** Sender's FedEx Account Number
 Sender's Name **Douglas Boyles** Phone **(908) 723-3091**
 Company **Varian Medical Systems**
 Address **S Highland St.** Dept./Floor/Suite/Room
 City **New Britain** State **CT** ZIP **06050**

Your Internal Billing Reference
 First 24 characters will appear on invoice.

To Recipient's Name
 Phone **(307) 589-5720**

Company **ALPHA-OMEGA SERVICES INC**

Address **1282 BIG WOOD STARKS RD** Dept./Floor/Suite/Room
 We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address
 Use this line for the HOLD location address or for continuation of your shipping address.

City **VINTON** State **LA** ZIP **70668-5202**

HOLD Weekday
 FedEx location address
 REQUIRED: Select this option for FedEx First Overnight.

HOLD Saturday
 FedEx location address
 REQUIRED: Select this option for FedEx Priority Overnight and FedEx 2Day to select locations.

0100982426

4 Express Package Service * To most locations.

Packages up to 150 lbs.
 For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

- FedEx First Overnight**
 Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- 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 2Day A.M.**
 Second business morning.* Saturday Delivery NOT available.
- FedEx 2Day**
 Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- FedEx Express Saver**
 Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit \$500.

- FedEx Envelope*
- FedEx Pak*
- FedEx Box
- FedEx Tube
- Other

6 Special Handling and Delivery Signature Options

- SATURDAY Delivery**
 (Not available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.)
- 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?

- No
- Yes *As per attached Shipper's Declaration.*
- Yes *Shipper's Declaration not required.*
- Dry Ice
 Dry Ice, 9, UN 1845 _____ x _____ kg
- Cargo Aircraft Only

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.
 Sender Acct. No. in Section 1 will be billed. Recipient Third Party Credit Card Cash/Check
 FedEx Acct. No. **2210-0820-0** Exp. Date _____
 Credit Card No. _____

Total Packages **1** Total Weight **0.7553** lbs. Total Declared Value! \$ _____

*Our liability is limited to US\$100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

611

PULL AND RETAIN THIS COPY BEFORE AFFIXING TO THE PACKAGE. NO POUCH NEEDED.


SHIPPER'S DECLARATION FOR DANGEROUS GOODS

(Provide at least three copies to the airline.)

Shipper
VARIAN MEDICAL SYSTEMS
 3100 HANSEN WAY
 PALO ALTO, CA 94304
 USA

Air Waybill No. 801982229898
 Page 1 of 1 Pages
 Shipper's Reference Number
 24-01-3563-001-021215-11295-33 H64F192-GM

Consignee
ALPHA-OMEGA SERVICES, INC.
 1282 BIG WOODS-STARKS ROAD
 EDGERLY (VINTON), LA 70668
 PHONE: (337) 589-5720
 USA



This template for shipments
 NOT subject to FX-18 Only

Two completed and signed copies of this Declaration must be handed to the operator

WARNING
 Failure to comply with all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties.

TRANSPORT DETAILS

This shipment is within the limitations prescribed for: <i>(delete non applicable)</i>	Airport of Departure
PASSENGER AND CARGO AIRCRAFT	
Airport of Destination:	

Shipment type: *(delete non-applicable)*
 RADIOACTIVE

NATURE AND QUANTITY OF DANGEROUS GOODS


Dangerous Goods Identification				Quantity and type of packaging	Packing Inst.	Authorization
UN or ID No.	Proper Shipping Name	Class or Division (Subsidiary Risk)	Pack-ing Group			
UN 3332	RADIOACTIVE MATERIAL, TYPE A PACKAGE, SPECIAL FORM	7		IRIDIUM 192 1 TYPE A PACKAGE x <u>95</u> GBq. OVERPACK USED	II-YELLOW T.I. <u>0.2</u> Dimensions 34cm x 34cm x 37cm	SPECIAL FORM CERTIFICATE USA/0723/S-96 (REV 2) ATTACHED

Additional Handling Information
 FOR MEDICAL TREATMENT. ICAO USED.
 EMERGENCY RESPONSE 24-HOUR NUMBER WORLDWIDE: CHEMTREK +1-703-527-3887
 (Varian Medical Systems BrachyTherapy, CHEMTREK Customer Number: CCN207467)

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. I declare that all of the applicable air transport requirements have been met.

+1-703-527-3887
 Emergency Telephone Number

Name/Title of Signatory
 Doug Boyles, FSE
 Place and Date
 NEW BRITAIN, CT 20-Jul-15
 Signature
(see warning above)



FOR RADIOACTIVE MATERIAL SHIPMENT ACCEPTABLE FOR PASSENGER AIRCRAFT, THE SHIPMENT CONTAINS RADIOACTIVE MATERIAL INTENDED FOR USE IN OR INCIDENT TO RESEARCH, MEDICAL DIAGNOSIS, OR TREATMENT. ADR EUROPEAN TRANSPORT STATEMENT: CARRIAGE IN ACCORDANCE WITH 1.1.4.2.1



Alpha-Omega Services, Inc.

Where Quality Means Exceeding Expectations

TO WHOM IT MAY CONCERN

This will hereby certify that Alpha-Omega Services, Inc., having it's HDR facility located at 1282 Bigwoods-Starks Road, Vinton, Louisiana, 70668, USA has received the folowing container and source:

- Date of returning container : 7/30/2015
- Container serial number : 482
- Connector number : 24-3563-14
- Source serial number : 24-01-3563-001-021215-11295-33
- Machine number : H64F192-GM

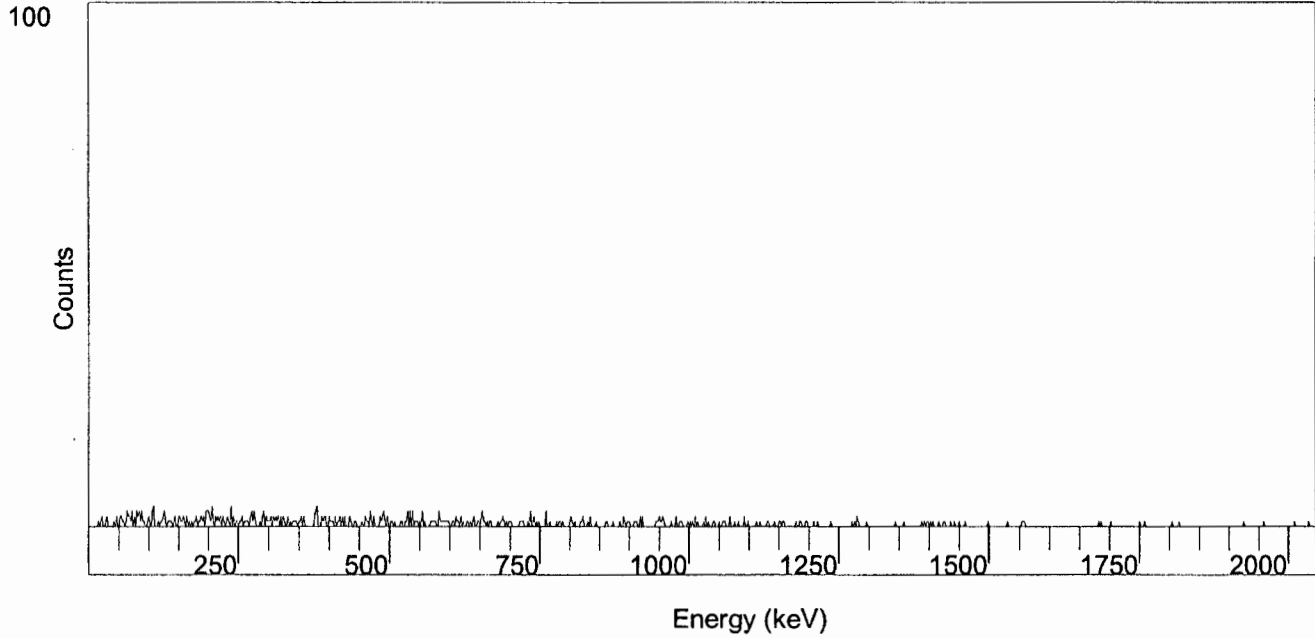
From: The Hospital of Central Connecticut
New Britian General Hospital
Department of Radiation Oncology
5 Highland Street
New Britian, CT
06050
USA

This container was originally shipped on behalf of Varian Medical Systems.

The source will be disposed of by Alpha-Omega Services, Inc., at it's HDR facility, located at 1282 Bigwoods-Starks Road, Vinton, Louisiana, USA on behalf of Varian Medical Systems. Alpha-Omega Services, Inc. is licensed by the state of Louisiana to perform this service.

Jude Bruno, Engineer
Alpha-Omega Services, Inc.
Tel. 337-589-5720
Fax 337-589-5955
aoslab@alpha-omegaserv.com

Wipe Test Analysis



SUITCASE

Trigger Level: 2000 dpm Counted For: 60.0 seconds

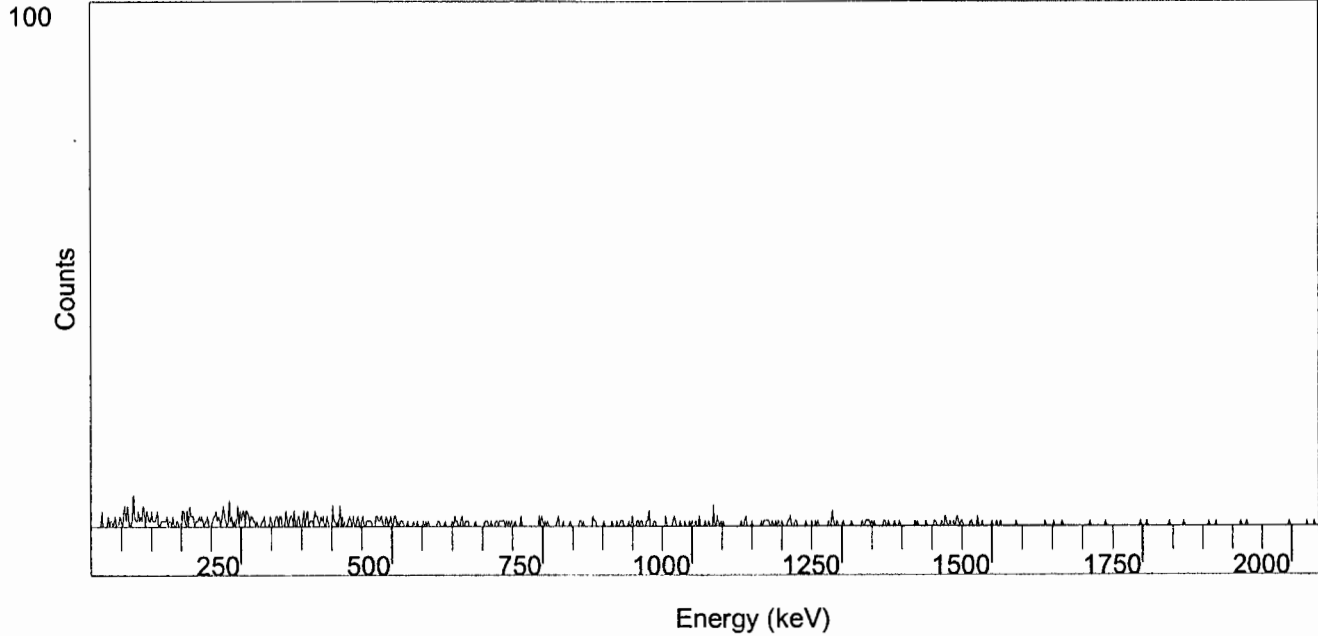
Full Spectrum Efficiency = 65%
Background : 479.0 cpm
Net Counts : -10.00 cpm

Total Counts: 469.0 cpm
Net Activity: 0.000 dpm

Energy (keV)	Net Counts (cpm)	Isotope	Activity (dpm)
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Comment
HDR UNIT EXTERIOR

Wipe Test Analysis



SUITCASE

Trigger Level: 2000 dpm Counted For: 60.0 seconds

Full Spectrum Efficiency = 65%
Background : 479.0 cpm
Net Counts : 1.000 cpm

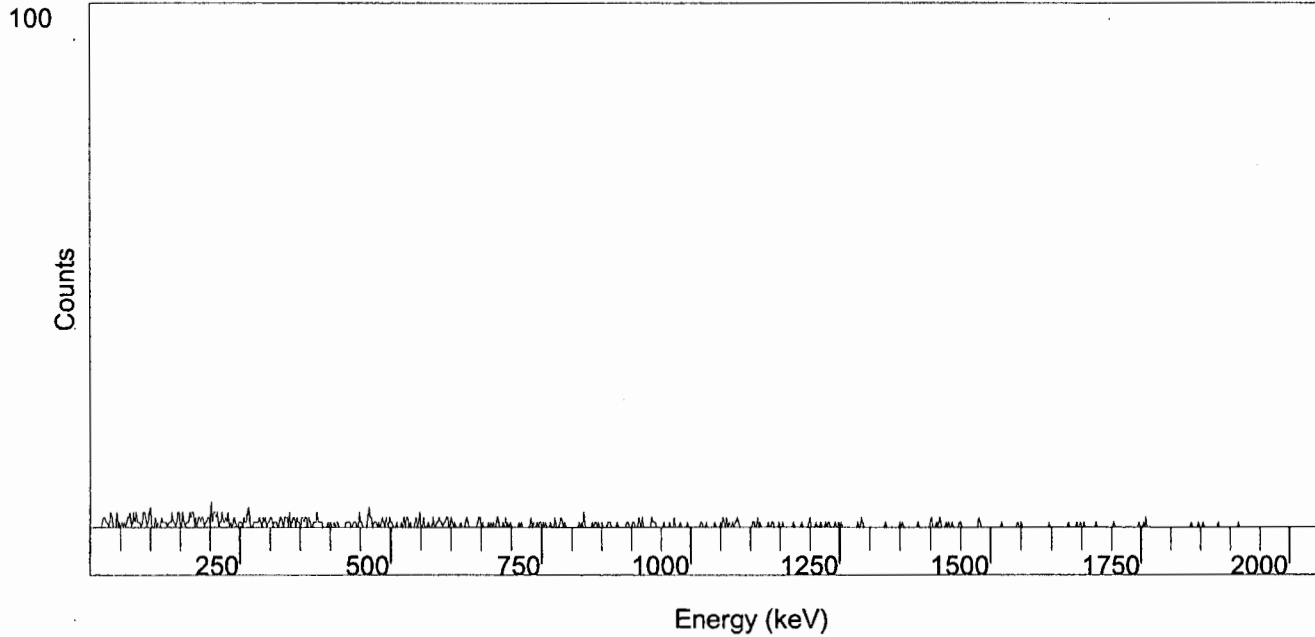
Total Counts: 480.0 cpm
Net Activity: 1.538 dpm

Energy (keV)	Net Counts (cpm)	Isotope	Activity (dpm)
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Comment

HDR INTERNAL COMPONENTS

Wipe Test Analysis



SUITCASE

Trigger Level: 2000 dpm Counted For: 60.0 seconds

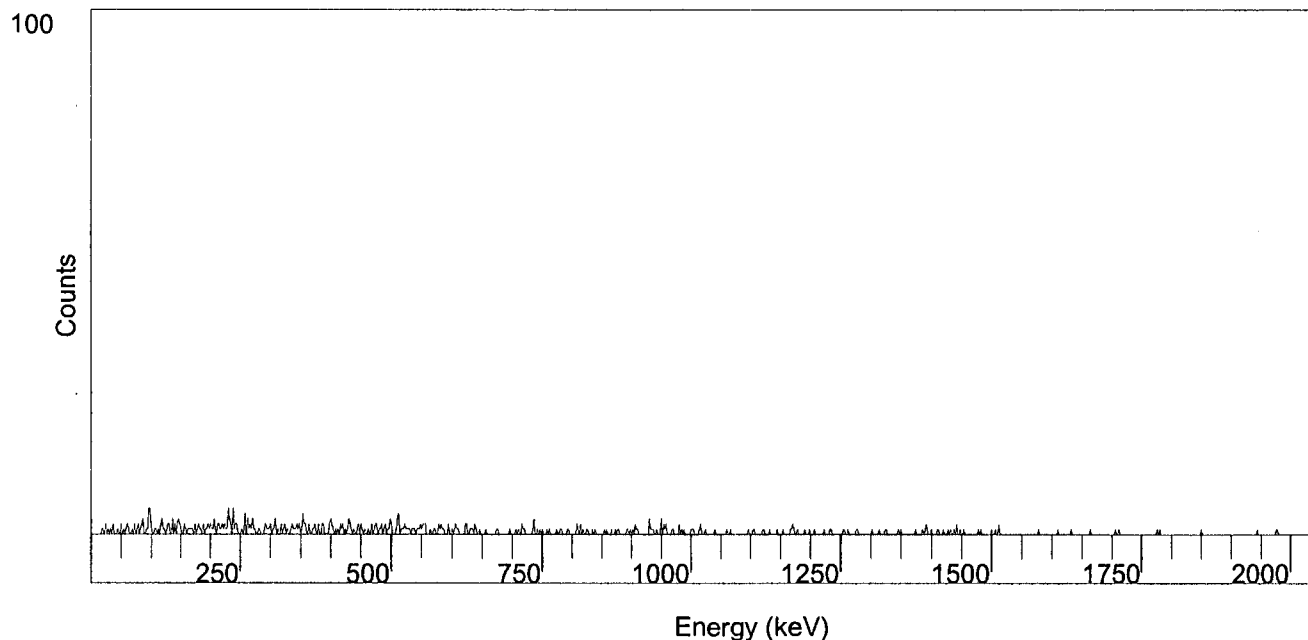
Full Spectrum Efficiency = 65 %
Background : 479.0 cpm
Net Counts : -12.00 cpm

Total Counts: 467.0 cpm
Net Activity: 0.000 dpm

Energy (keV)	Net Counts (cpm)	Isotope	Activity (dpm)
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Comment
HDR INSIDE SHIELD

Wipe Test Analysis



SUITCASE

Trigger Level: 2000 dpm Counted For: 60.0 seconds

Full Spectrum Efficiency = 65%
Background : 479.0 cpm
Net Counts : -15.00 cpm

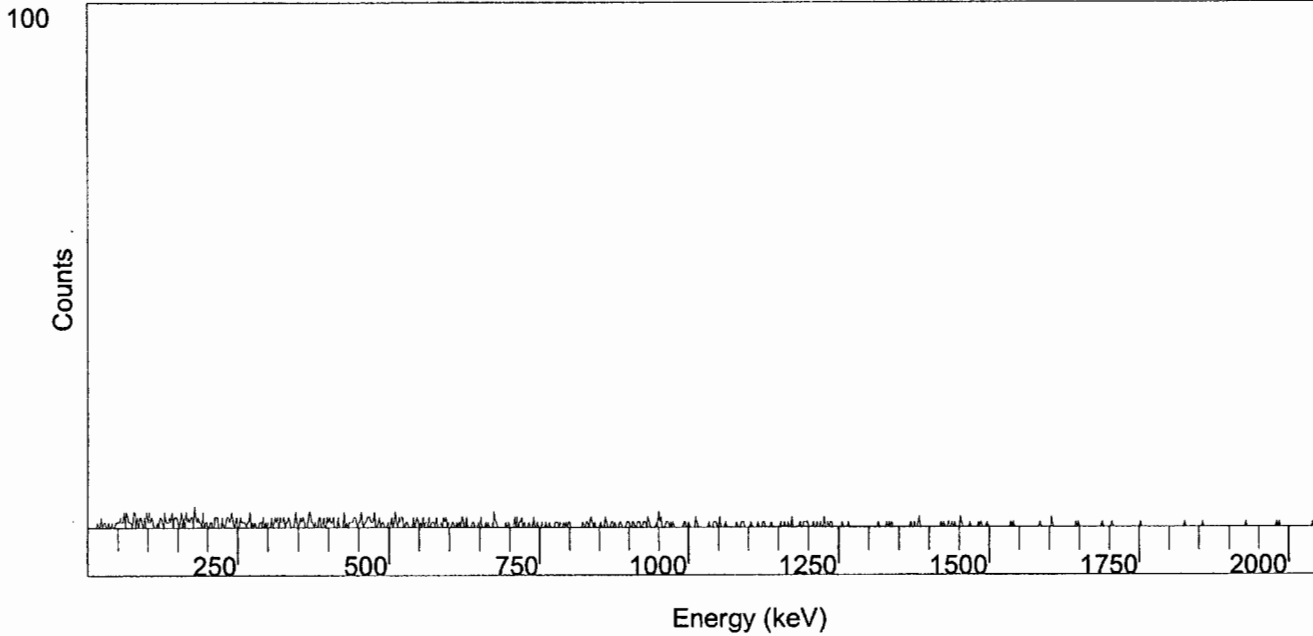
Total Counts: 464.0 cpm
Net Activity: 0.000 dpm

Energy (keV)	Net Counts (cpm)	Isotope	Activity (dpm)
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Comment

HDR CLOSET FLOOR

Wipe Test Analysis



SUITCASE

Trigger Level: 2000 dpm Counted For: 60.0 seconds

Full Spectrum Efficiency = 65 %
Background : 479.0 cpm
Net Counts : -17.00 cpm

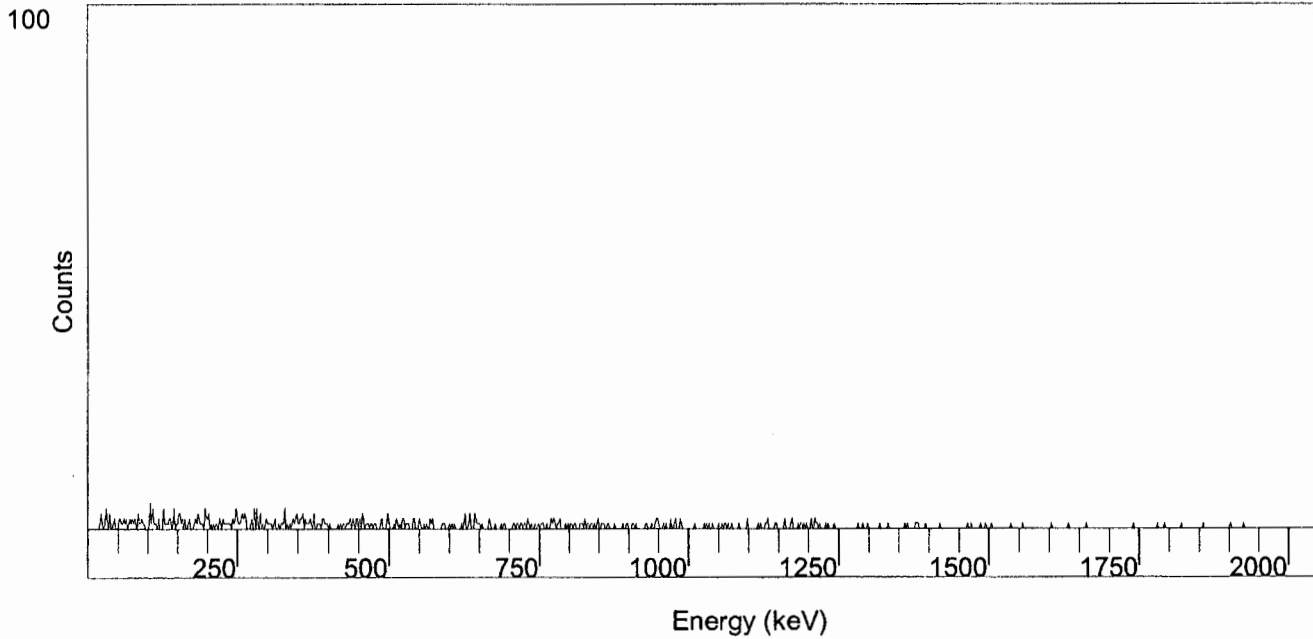
Total Counts: 462.0 cpm
Net Activity: 0.000 dpm

Energy (keV)	Net Counts (cpm)	Isotope	Activity (dpm)
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Comment

HDR CLOSET STORAGE RACK

Wipe Test Analysis



SUITCASE

Trigger Level: 2000 dpm Counted For: 60.0 seconds

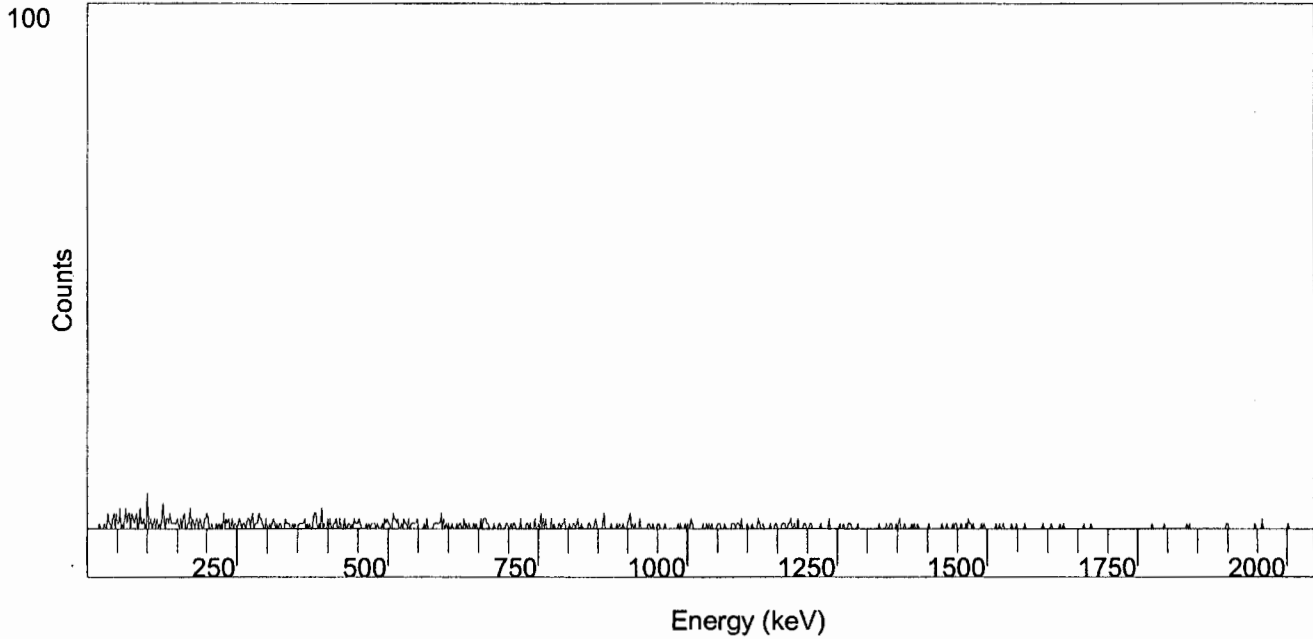
Full Spectrum Efficiency = 65%
Background : 479.0 cpm
Net Counts : 2.000 cpm

Total Counts: 481.0 cpm
Net Activity: 3.077 dpm

Energy (keV)	Net Counts (cpm)	Isotope	Activity (dpm)
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Comment
HDR LEAD PIG

Wipe Test Analysis



SUITCASE

Trigger Level: 2000 dpm Counted For: 60.0 seconds

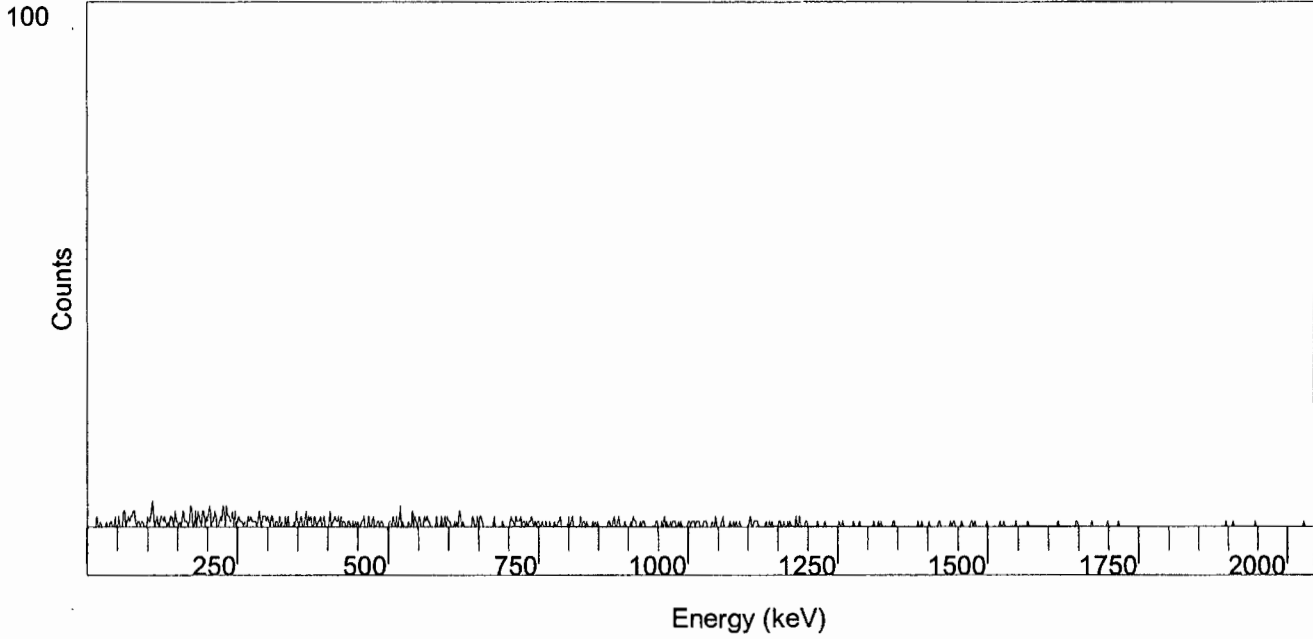
Full Spectrum Efficiency = 65 %
Background : 479.0 cpm
Net Counts : 3.000 cpm

Total Counts: 482.0 cpm
Net Activity: 4.615 dpm

Energy (keV)	Net Counts (cpm)	Isotope	Activity (dpm)
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Comment
HDR QA EQUIPMENT

Wipe Test Analysis



SUITCASE

Trigger Level: 2000 dpm Counted For: 60.0 seconds

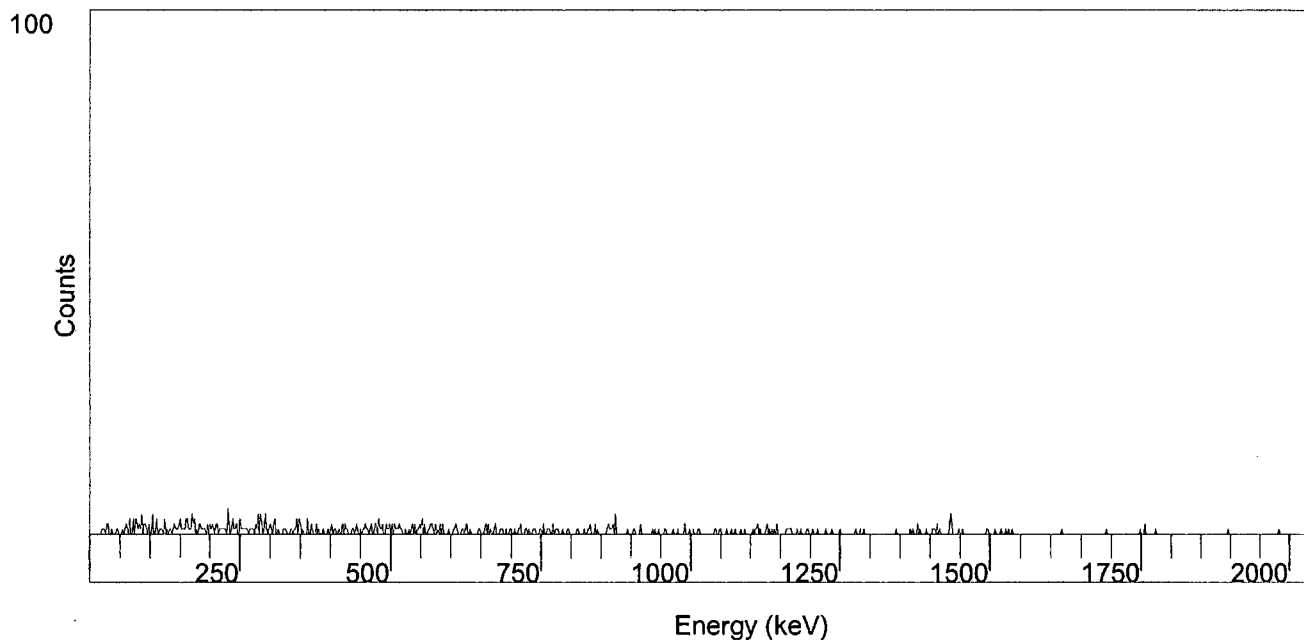
Full Spectrum Efficiency = 65%
Background : 479.0 cpm
Net Counts : -15.00 cpm

Total Counts: 464.0 cpm
Net Activity: 0.000 dpm

Energy (keV)	Net Counts (cpm)	Isotope	Activity (dpm)
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Comment
TREATMENT VAULT FLOOR

Wipe Test Analysis



SUITCASE

Trigger Level: 2000 dpm Counted For: 60.0 seconds

Full Spectrum Efficiency = 65%
Background : 479.0 cpm
Net Counts : -18.00 cpm

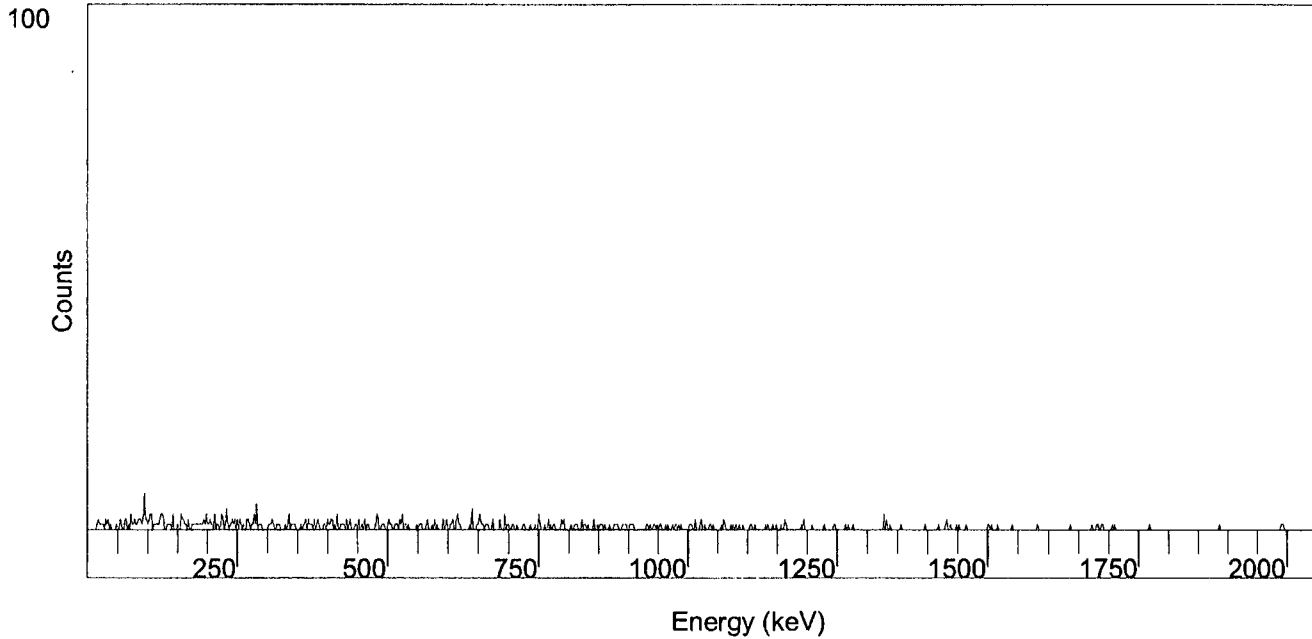
Total Counts: 461.0 cpm
Net Activity: 0.000 dpm

Energy (keV)	Net Counts (cpm)	Isotope	Activity (dpm)
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Comment

TREATMENT VAULT COUCH

Wipe Test Analysis



SUITCASE

Trigger Level: 2000 dpm Counted For: 60.0 seconds

Full Spectrum Efficiency = 65%
Background : 479.0 cpm
Net Counts : -26.00 cpm

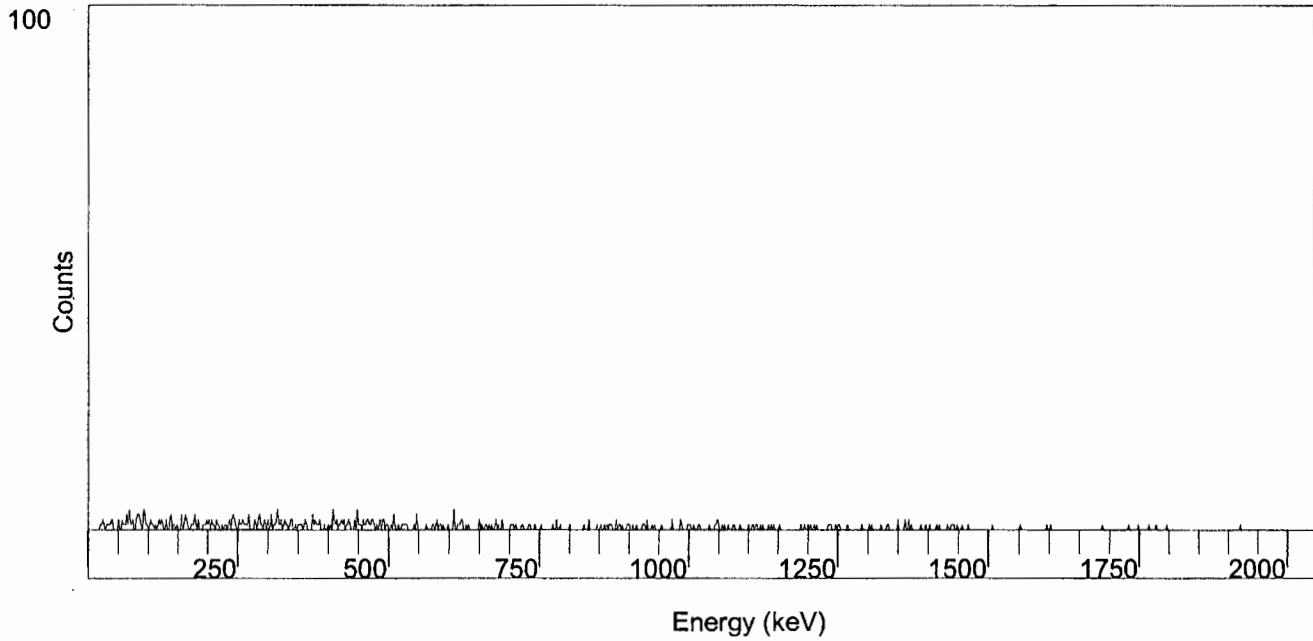
Total Counts: 453.0 cpm
Net Activity: 0.000 dpm

Energy (keV)	Net Counts (cpm)	Isotope	Activity (dpm)
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Comment

TREATMENT VAULT COUNTERS

Wipe Test Analysis



SUITCASE

Trigger Level: 2000 dpm Counted For: 60.0 seconds

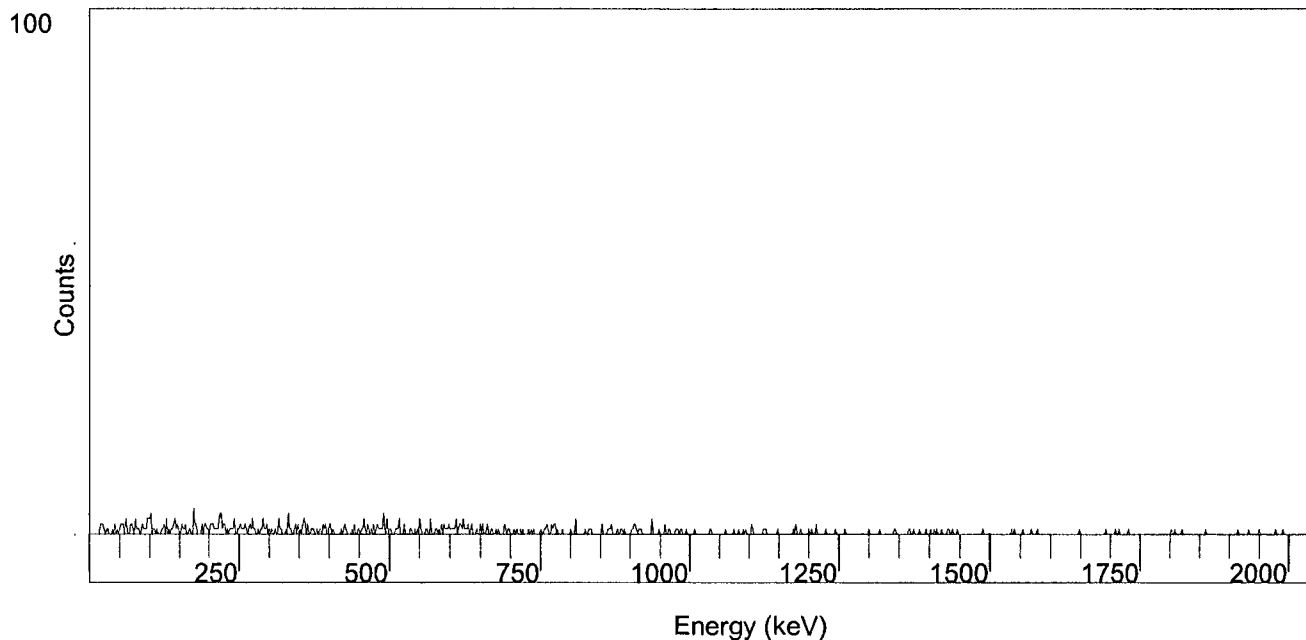
Full Spectrum Efficiency = 65%
Background : 479.0 cpm
Net Counts : -46.00 cpm

Total Counts: 433.0 cpm
Net Activity: 0.000 dpm

Energy (keV)	Net Counts (cpm)	Isotope	Activity (dpm)
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Comment
TREATMENT VAULT LINAC

Wipe Test Analysis



SUITCASE

Trigger Level: 2000 dpm Counted For: 60.0 seconds

Full Spectrum Efficiency = 65%
Background : 479.0 cpm
Net Counts : -27.00 cpm

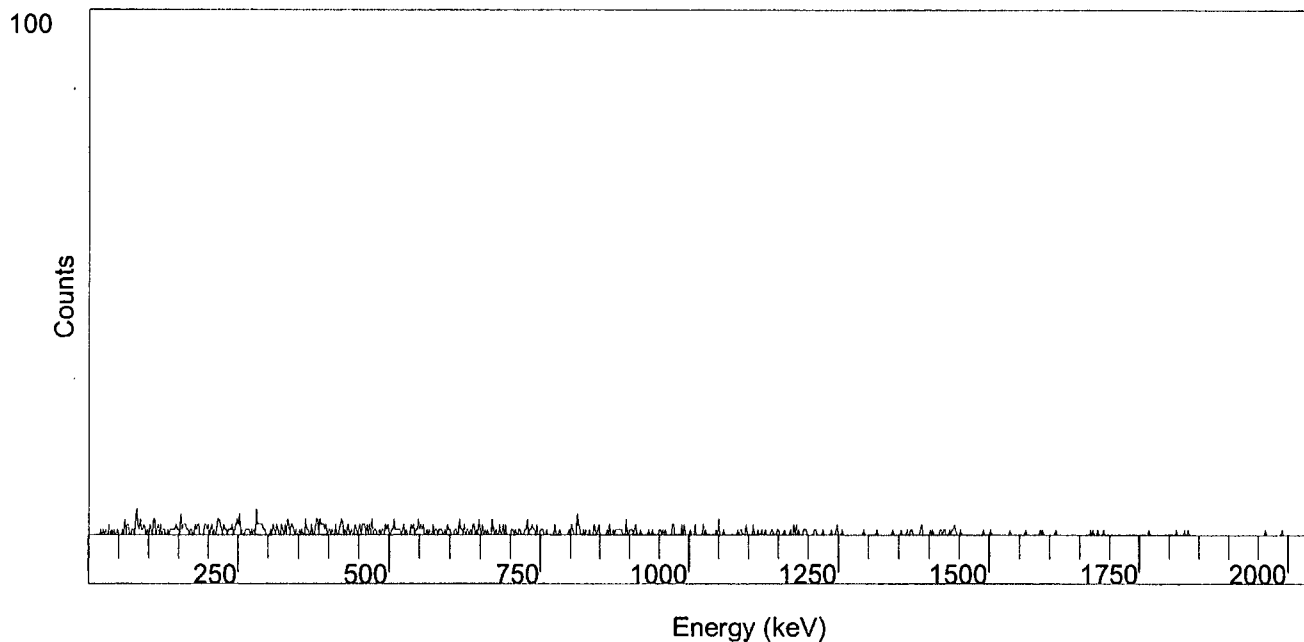
Total Counts: 452.0 cpm
Net Activity: 0.000 dpm

Energy (keV)	Net Counts (cpm)	Isotope	Activity (dpm)
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Comment

TREATMENT VAULT CABINENTS

Wipe Test Analysis



SUITCASE

Trigger Level: 2000 dpm Counted For: 60.0 seconds

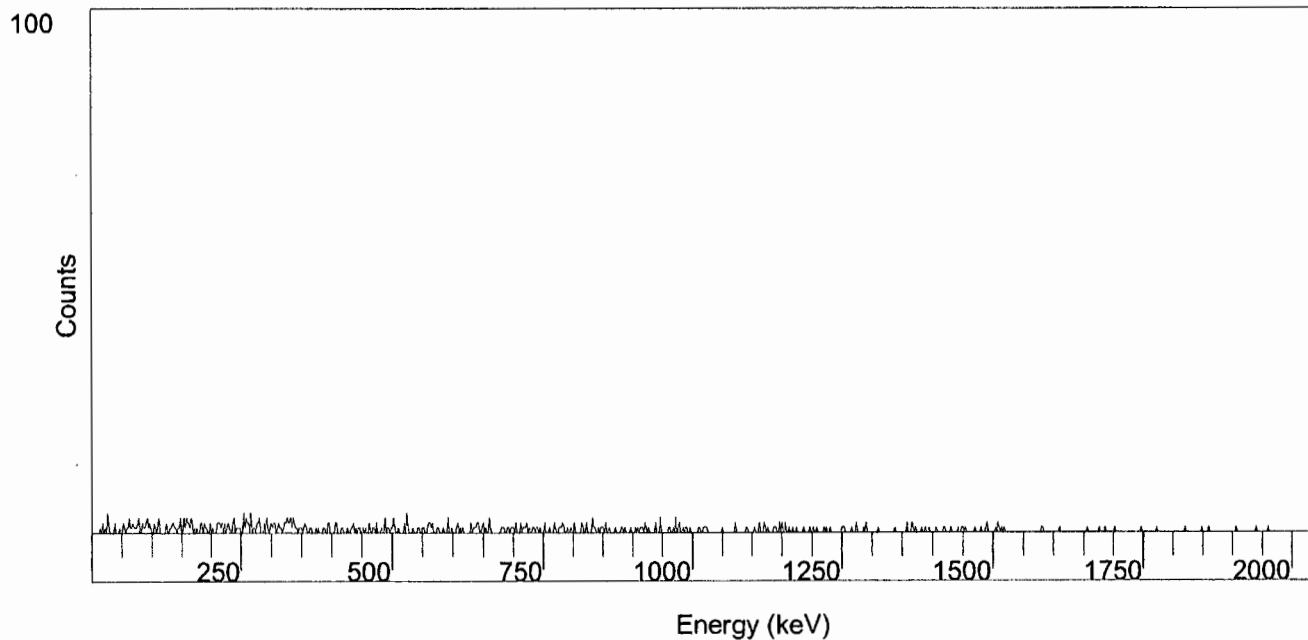
Full Spectrum Efficiency = 65 %
Background : 479.0 cpm
Net Counts : 13.00 cpm

Total Counts: 492.0 cpm
Net Activity: 20.00 dpm

Energy (keV)	Net Counts (cpm)	Isotope	Activity (dpm)
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Comment
HOT LAB FLOOR

Wipe Test Analysis



SUITCASE

Trigger Level: 2000 dpm Counted For: 60.0 seconds

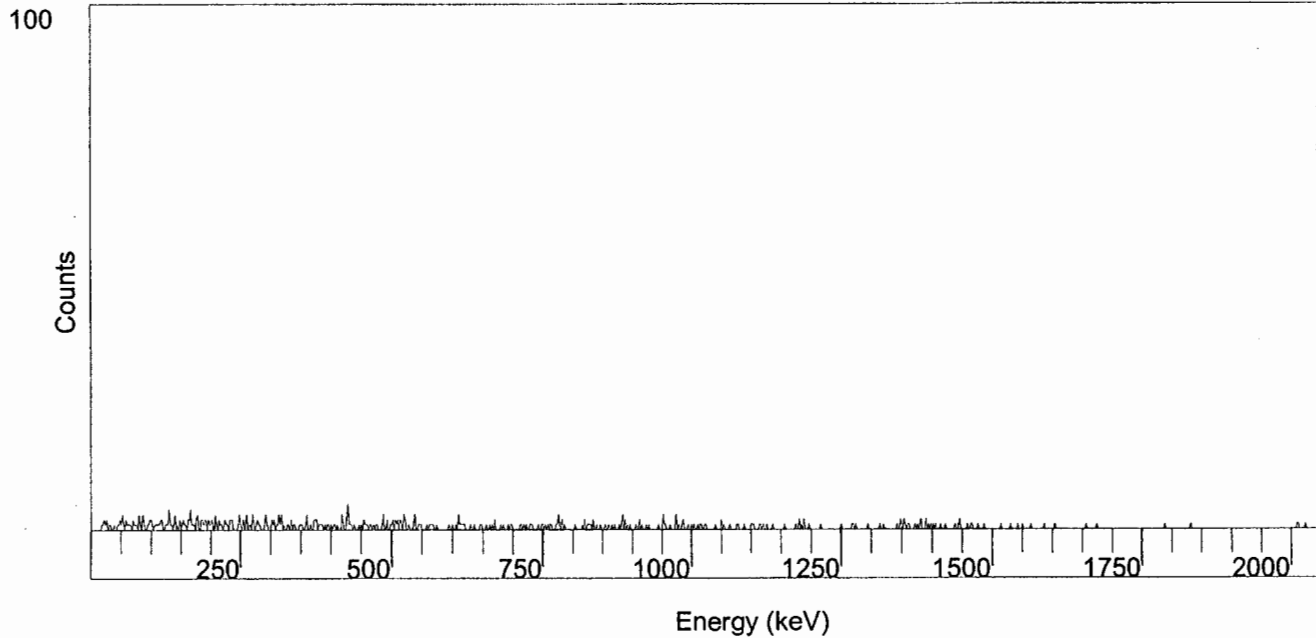
Full Spectrum Efficiency = 65 %
Background : 479.0 cpm
Net Counts : -8.000 cpm

Total Counts: 471.0 cpm
Net Activity: 0.000 dpm

Energy (keV)	Net Counts (cpm)	Isotope	Activity (dpm)
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Comment
HOT LAB COUNTER

Wipe Test Analysis



SUITCASE

Trigger Level: 2000 dpm Counted For: 60.0 seconds

Full Spectrum Efficiency = 65%
Background : 479.0 cpm
Net Counts : -39.00 cpm

Total Counts: 440.0 cpm
Net Activity: 0.000 dpm

Energy (keV)	Net Counts (cpm)	Isotope	Activity (dpm)
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Comment
HOT LAB CABINETS

This is to acknowledge the receipt of your (C) application dated

8/10/15, and to inform you that the initial processing which includes an administrative review has been performed.

Ameudment (06-02388-01) There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 588665.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.