

MATERIALS LICENSE

Amendment No. 08

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee	In accordance with letter dated September 18, 1996	
1. Corning Clinical Laboratories	3. License Number 21-19011-01 is amended in its entirety to read as follows:	
2. 2740 28th Street, S.W. Grand Rapids, MI 49509	4. Expiration Date September 30, 2001	
	5. Docket or Reference No. 030-15207	
6. Byproduct, Source, and/or Special Nuclear Material	7. Chemical and/or Physical Form	8. Maximum Amount that Licensee May Possess at Any One Time Under This License
A. Iodine-125	A. Prepackaged kits	A. 6.0 millicuries

9. Authorized Use:

A. To be used for in vitro studies.CONDITIONS

10. Licensed material shall be used only at the licensee's facilities located at 2740 28th Street, S.W., Grand Rapids, Michigan.
11. Licensed material shall be used by, or under the supervision of, Craig Longstreet, Mary Walker, Carl Wierenga, or Denise Kowalko.
12. Licensed material shall not be used in or on human beings or in products distributed to the public.
13. The Radiation Safety Officer for this license is Craig Longstreet.
14. The licensee is authorized to hold radioactive material with a physical half-life of less than 65 days for decay-in-storage before disposal in ordinary trash provided:
 - A. Radioactive waste to be disposed of in this manner shall be held for decay a minimum of 10 half-lives.

9612030179 961122
PDR ADOCK 03015207
C PDR

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**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number

21-19011-01

Docket or Reference Number

030-15207

Amendment No. 08

- B. Before disposal as ordinary trash, byproduct material shall be surveyed at the container surface with the appropriate survey meter set on its most sensitive scale and with no interposed shielding to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.
- C. A record of each disposal permitted under this License Condition shall be retained for three years. The record must include the date of disposal, the date on which the byproduct material was placed in storage, the radionuclides disposed, the survey instrument used, the background dose rate, the dose rate measured at the surface of each waste container, and the name of the individual who performed the disposal.
15. Except as specifically provided otherwise in this license, the license shall conduct its program in accordance with the statements, representations, and procedures contained in the documents including any enclosures, listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- A. Application dated March 7, 1995, and
- B. Letters dated August 9, 1996, and September 18, 1996.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date 11/22/96

By

Kevin G. Null
Nuclear Materials Licensing Branch, Region III

COPY

BETWEEN:

License Fee Management Branch, ARM
and
Regional Licensing Sections

(FOR LFMS USE)
INFORMATION FROM LTS

Program Code: 02410
Status Code: 0
Fee Category: 3P
Exp. Date: 20010930
Fee Comments:
Decom Fin Assur Req: N

S7

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: CORNING CLINICAL LABORATORIES
Received Date: 960926
Docket No: 3015207
Control No.: 301875
License No.: 21-19011-01
Action Type: Amendment

2. FEE ATTACHED

Amount: ~~-----~~
Check No.: ~~-----~~

* Addl Info
398275-157

3. COMMENTS

Signed D. Hersey
Date 9-27-96

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered / ✓)

1. Fee Category and Amount: 3P **FEE NOT REQUIRED**

2. Correct Fee Paid: ✓ Application may be processed for:
Amendment -----
Renewal -----
License -----

3. OTHER -----

Signed SC
Date 10/4/96

1996 OCT -3 AM 11:08

OCT 09 1996

RECEIVED BY LFDCB	
Date	<u>Oct. 3, 1996</u>
Log	<u>Oct 1 III</u>
By	<u>SC</u>
Date Completed	<u>10/4/96</u>

Corning Clinical Laboratories, Inc.
2740 28th St., S.W.
Grand Rapids, MI 49509-2192
616.538.6700
800.777.0706

CORNING Clinical
Laboratories

September 18, 1996

Mr. Bill Reichhold
US Nuclear Regulatory
Commission - Region 3
801 Warrenville Road
Lisle, IL 60532-4351

21-19011-01
030-15207

Re: Additional Information to Control No. 398275 Close-Out Survey
of our Decay in Storage Room at 2635 Prairie SW, Grand Rapids,
Michigan

Dear Mr. Reichhold:

The storage room only contained sealed cardboard barrels of solid test tubes which contained iodine 125 bound at various levels to the inside of each tube. No liquid radioactive material or sealed sources were ever used or stored in the room. None of the barrels were opened in the room. All barrels were sealed closed at our 28th Street laboratory and then returned to our 28th Street lab for opening and monitoring before disposal. Each barrel contained less than 30 microroentgen per hour.

The Prairie Street room was first used for decay in storage with our license renewal of March, 1985 and has only been used for decay of the solid bound tubes containing iodine 125. A lapel radiation badge from Landauer was kept in the room, 24 hours a day, 7 days a week, to monitor the radiation level. The name on this badge was titled "Storage Room". I have enclosed a copy of the most recent monthly and annual reports showing exposure levels for this badge. I have also included copies of our solid waste disposal logs from March, 1991 to the present.

As of July 31, 1996, we no longer use the Prairie Street room for decay in storage. At that time there were 19 barrels in storage. All barrels were returned to our current main laboratory storage area at the 28th Street address. Four of the barrels were discarded, since the radiation was below background levels and each barrel had been held greater than 10 half-lives for iodine 125.

On August 5, 1996, Carl Wierenga performed exposure rate measurements with the TBM-3S surface monitor and area wipe tests on the Prairie Street room.

Continuation of
398275

RECEIVED

SEP 26 1996

REGION III

301875
SEP 26 1996

Pm: 9-23-96

Rate Measurement Results:

The floor and wall areas associated with the letters A through J show where the measurements were taken. Each measurement was made at 1 meter and less from the surface. Readings from all areas were less than 30 microroentgen per hour (see attached diagram). Background levels were also less than 30 microroentgen per hour. The rate meter as of August 5, 1996 had been last calibrated on August 8, 1995. It was recalibrated again on August 15, 1996 (copies attached).

Wipe Test Results:

The floor areas associated with the numbers 1 through 9 on the attached diagram were checked by wiping a 1000 cm² area with the following results:

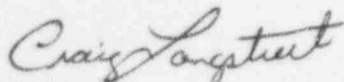
<u>Area</u>	<u>DPM/1000 cm²</u>	<u>DPM/100 cm²</u>
1	20	2.0
2	24	2.4
3	30	3.0
4	29	2.9
5	16	1.6
6	32	3.2
7	23	2.3
8	22	2.2
9	21	2.1
10 Control	20	2.0

A Packard 10-well Cobra gamma counter was used for the wipe test and is calibrated each day of use using 10 matched iodine 125 sources purchased from Packard every 6 months. Our log of the daily calibration is attached, as well as a sample print from the gamma counter.

There was no surface contamination detected; therefore, no removable contamination.

To the best of my knowledge, I have addressed the items you listed in your letter dated September 11, 1996. Please let me know if I have overlooked something or if you need further clarification.

Sincerely,



Craig Longstreet

CL/bvw

Attachments

Service Drive

Unit #525

D

X₃

C

X₂

B

X₁

A

Unit #526

F

X₄

G

X₉

X₅

H

X₈

X₆

I

X₇

over head door

J

Unit #527

[X] Wipe test areas
of the floor.

Old Storage in Decay Bldg #526
at 2635 Prairie SW.
Grand Rapids, MI 49509

Service Drive

NETPATH OF MICHIGAN
ATTN CRAIG LONGSTREET
2740 28TH ST S W
GRAND RAPIDS MI 49509

ACCOUNT NO.	SERIES CODE
70639	

RADIATION DOSIMETRY REPORT

NAME	PARTICIPANT NUMBER	TYPE OF RECORD	DOSIMETER TYPE OR SOURCE	NOTES
FOR MONITORING PERIOD:				
CONTROL		CONTROL	G	
FOR MONITORING PERIOD:				
STORAGE ROOM	00030	MHL BODY	G	*
WALK-IN REFRIG	00041	MHL BODY	G	*
[REDACTED]	[REDACTED]	MHL BODY	G	*
[REDACTED]	[REDACTED]	MHL BODY	G	*
[REDACTED]	[REDACTED]	MHL BODY	G	*
[REDACTED]	[REDACTED]	MHL BODY	G	*
[REDACTED]	[REDACTED]	MHL BODY	G	*
[REDACTED]	[REDACTED]	MHL BODY	G	*
[REDACTED]	[REDACTED]	MHL BODY	G	*

NOTES DESCRIPTION:

* - NO CONTROL SUBTRACTED

PROC NO.	REPORT DATE	BOSIMETER RECEIVED	REPORT TIME IN WORK DAYS	PAGE NO.
EG774	7/19/96	7/15/96	4	1

QUALITY CONTROL RELEASE
RAH

** ONLY PAGE **

LANDAUER®

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708)755-7000 Facsimile: (708)755-7016

Accredited by the National Institute of Standards and Technology through

NVLAP*

DOSE EQUIVALENT (MREM) OR PERIODS SHOWN BELOW			ACCUMULATED DOSE EQUIVALENT (MREM)			ACCUMULATED DOSE EQUIVALENT (MREM)			INCEPTION DATE MO/YR	LAST AMENDMENT	RECORDS FOR YEAR	ID NUMBER	SEX	BIRTH DATE MO/DA/YR
DEEP DOE	EYE LDE	SHALLOW SDE	DEEP DOE	EYE LDE	SHALLOW SDE	DEEP DOE	EYE LDE	SHALLOW SDE						
05/10/96	06/06/96			QTR 2			1998							
M	M	M							7/74		5			
06/10/98	07/06/96			QTR 2			1998							
M	M	M	M	M	M	M	M	M	4/83		6			
M	M	M	M	M	M	M	M	M	7/84		6			
M	M	M	M	M	M	M	M	M	12/84		6			
M	M	M	M	M	M	M	M	M	5/90		6			
M	M	M	M	M	M	M	M	M	8/92		5			
M	M	M	M	M	M	M	M	M	7/93		6			
M	M	M	M	M	M	M	M	M	3/94		6			
M	M	M	M	M	M	M	M	M	10/94		6			
M	M	M	M	M	M	M	M	M	11/94		6			

OCCUPATIONAL EXPOSURE RECORD FOR A MONITORING PERIOD

This form is for use in place of certain reports required by NRC licensees, OSHA and state regulations. It reflects data provided to or by your account and contains information for NRC Form 5 and other equivalent forms.

Prepared by

LANDAUER®

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708) 755-7000 Facsimile: (708) 755-7016

ACCOUNT NUMBER 70639		SERIES CODE		PARTICIPANT NUMBER 00030	
1. NAME (LAST, FIRST, MIDDLE INITIAL) STORAGE ROOM			2. IDENTIFICATION NUMBER		3. ID TYPE
4. SEX <input type="checkbox"/> MALE <input type="checkbox"/> FEMALE			5. DATE OF BIRTH		
6. MONITORING PERIOD 01/10/95 - 01/09/96		7. LICENSEE NAME METPATH OF MICH		8. LICENSE NUMBER(S)	
<input checked="" type="checkbox"/> RECORD		<input checked="" type="checkbox"/> ROUTINE		<input type="checkbox"/> ESTIMATE <input type="checkbox"/> PSE	
INTAKES				DOSES (in rem)	
10A. RADIONUCLIDE	10B. CLASS	10C. MODE	10D. INTAKE IN μ Ci		
				DEEP DOSE EQUIVALENT (DDE)	11. M
				EYE DOSE EQUIVALENT TO THE LENS OF THE EYE (LDE)	12. M
				SHALLOW DOSE EQUIVALENT, WHOLE BODY (SDE, WB)	13. M
				SHALLOW DOSE EQUIVALENT, MAX EXTREMITY (SDE, ME)	14.
				COMMITTED EFFECTIVE DOSE EQUIVALENT (CEDE)	15.
				COMMITTED DOSE EQUIVALENT, MAXIMALLY EXPOSED ORGAN (CDE)	16.
				TOTAL EFFECTIVE DOSE EQUIVALENT (BLOCKS 11 + 15) (TEDE)	17. M
				TOTAL ORGAN DOSE EQUIVALENT, MAX ORGAN (BLOCKS 11 + 16) (TODE)	18. M
				19. COMMENTS	
				PERMANENT TO DATE (IN REM)	
				DDE : 0.220	
				LDE : 0.220	
				SDE, WB: 0.280	
				SDE, ME:	
				TEDE : 0.220	
20. SIGNATURE - LICENSEE <i>Craig Longstreet</i>				DATE SIGNED 3-11-96	
				21. DATE PREPARED 02/21/96	

OCCUPATIONAL EXPOSURE RECORD FOR A MONITORING PERIOD

Prepared by

This form is for use in place of certain reports required by NRC licensees, OSHA and state regulations. It reflects data provided to or by your account and contains information for NRC Form 5 and other equivalent forms.

LANDAUER®

ACCOUNT NUMBER

70639

SERIES CODE

PARTICIPANT NUMBER

00030

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708) 755-7000 Facsimile: (708) 755-7016

1. NAME (LAST, FIRST, MIDDLE INITIAL)

STORAGE ROOM

2. IDENTIFICATION NUMBER

3. ID TYPE

4. SEX

MALE

FEMALE

5. DATE OF BIRTH

6. MONITORING PERIOD

01/10/94 - 01/09/95

7. LICENSEE NAME

METPATH OF MICH

8. LICENSE NUMBER(S)

X

RECORD

ESTIMATE

X

ROUTINE

PSE

INTAKES

10A. RADIONUCLIDE

10B. CLASS

10C. MODE

10D. INTAKE IN μ CI

DOSES (in rem)

DEEP DOSE EQUIVALENT (DDE)

11.

M

EYE DOSE EQUIVALENT TO THE LENS OF THE EYE (LDE)

12.

M

SHALLOW DOSE EQUIVALENT, WHOLE BODY (SDE, WB)

13.

M

SHALLOW DOSE EQUIVALENT, MAX EXTREMITY (SDE, ME)

14.

COMMITTED EFFECTIVE DOSE EQUIVALENT (CEDE)

15.

COMMITTED DOSE EQUIVALENT,
MAXIMALLY EXPOSED ORGAN (CDE)

16.

TOTAL EFFECTIVE DOSE EQUIVALENT

(BLOCKS 11 + 15) (TEDE)

17.

M

TOTAL ORGAN DOSE EQUIVALENT,
MAX ORGAN (BLOCKS 11 + 16) (TODE)

18.

M

19. COMMENTS

PERMANENT TO DATE (IN REM)

DDE : 0.220

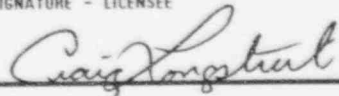
LDE : 0.220

SDE, WB : 0.280

SDE, ME :

TEDE : 0.220

20. SIGNATURE - LICENSEE



DATE SIGNED

3-22-95

21. DATE PREPARED

02/21/95

**CURRENT
OCCUPATIONAL
RADIATION
EXPOSURE**

Prepared by

Landauer®

Accredited by the
National Institute of Standards and Technology
through **NVLAP**

Landauer, Inc.
2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708) 755-7000 Facsimile: (708) 755-7016

ACCOUNT NO. **70639** SERIES CODE PARTICIPANT NO. **00030** PREPARATION MO. DAY YR. **2/25/94** DATE ☐ TERMINATION REPORT ☐ FIRST REPORT FOR MONITORED INDIVIDUAL (to be completed by customer) ☒

IDENTIFICATION

1. NAME (LAST, FIRST AND MIDDLE) STORAGE ROOM		2. SOCIAL SECURITY NUMBER		3. SEX		4. DATE OF BIRTH MO. DAY YEAR	
5. NAME OF LICENSEE OR REGISTRANT METPATH OF MICH				6. EMPLOYER - IF DIFFERENT FROM LICENSEE (COMPLETED BY CUSTOMER)			
7. CITY OR STATE REGISTRATION NUMBER				8. NRC, AGREEMENT STATE, OR STATE LICENSE			

OCCUPATIONAL EXPOSURE (EXTERNAL)

9. DOSE RECORD FOR						10. METHOD OF MONITORING											
CODE: TOTAL BODY (DEEP) - 1 SKIN OF TOTAL BODY (SHALLOW) - 2 RIGHT HAND - 3 LEFT HAND - 4 RIGHT WRIST - 5 LEFT WRIST - 6 OTHER EXTREMITY - 7 OTHER TOTAL BODY - 8						CODE: FILM/TLD BADGE - 1 POCKET CHAMBER - 2 CALCULATIONS - 3 SOLID STATE - 4 OTHER - 5											
11. PERIOD OF EXPOSURE FROM TO MO. DAY YR. MO. DAY YR.		12. X OR GAMMA DOSE FOR THE PERIOD (REM) DECIMAL		13. BETA DOSE FOR THE PERIOD (REM) DECIMAL		14. NEUTRON DOSE FOR THE PERIOD (REM) DECIMAL		15. TOTAL DOSE FOR THE PERIOD (REM) DECIMAL		16. TOTAL LIFETIME ACCUMULATED DOSE (REM) DECIMAL		17. PERMISSIBLE ACC. DOSE (50-150 REM)		18. UNUSED PART OF PERMISSIBLE ACC. DOSE (REM) DECIMAL		19. NUMBER OF BADGES REPORTED	
1/10/93 4/09/93		M						M		220						3	
4/10/93 7/09/93		M						M		220						3	
7/10/93 10/09/93		M						M		220						3	
10/10/93 1/09/94		M						M		220						3	
YEARLY TOTAL -																	

20. INCEPTION DATE OF SERVICE WITH LANDAUER, INC. 4/83		21. PREVIOUSLY SUPPLIED TOTAL OCCUPATIONAL EXTERNAL RADIATION EXPOSURE HISTORY INCLUDED IN COLUMN 16		DECIMAL		SKIN DOSE EXPOSURE INCLUDES SUM OF X OR GAMMA, BETA AND NEUTRON EXPOSURE "M" INDICATES EXPOSURE LESS THAN 10 MR.	
---	--	--	--	---------	--	--	--

ESTIMATE OF INTERNAL EXPOSURE (TO BE COMPLETED BY CUSTOMER)

22. PERIOD OF EXPOSURE FROM TO MO. DAY YR. MO. DAY YR.						23. NUCLIDE(S)		24. CRITICAL ORGAN(S)		25. ESTIMATE OF EXPOSURE	

C. Longstreet
4-14-94

CERTAIN REGULATORY AGENCIES REQUIRE THE REPORTING OF ADDITIONAL INFORMATION. THE FOLLOWING SPACE IS PROVIDED FOR YOUR CONVENIENCE IN ADDING THIS DETAIL.											
26. OCCUPATIONAL CLASSIFICATION		CODE NO.		27. SOURCE OF EXPOSURE		CODE NO.		28. CODE NO.		29. CODE NO.	
PHYSICIAN - 1				X-RAY - 1				RMA - 1 - 1			
TECHNICIAN DIRECTED BY PHYSICIAN - 2				RADIOACTIVE MATERIALS - 2				RMA - 2 - 2			
OTHER - 3				BOTH - 3							

This form is for use in place of certain reports required by OSHA, NRC licensees and by state regulations (29CFR1910.95 n, 10CFR19.13 and 10CFR20.401 - 20.409) or for the maintenance of individual personal radiation exposure files and satisfies regulations that require reporting of exposure to employees. It contains the requisite information for NRC FORM - 5, California RH - 2365, Illinois RMA - 1, Nebraska NRH - 2, New Hampshire RCA - 7, Tennessee RRS 8-2, TEXAS TRCR 22.13A, and other similar forms.

This report is furnished to you under the provisions of the Nuclear Regulatory Commission regulation 10 CFR part 19. You should preserve this report for further reference.

CURRENT OCCUPATIONAL RADIATION EXPOSURE

Prepared by

Landauer

Accredited by the
National Institute of Standards and Technology
through **NVLAP**

Landauer, Inc.
2 Science Road Glenwood, Illinois 60425-1586
Telephone: (708) 755-7000 Facsimile: (708) 755-7018

ACCOUNT NO. **70639** SERIES CODE **00030** PARTICIPANT NO. **00030** PREPARATION DATE **2/17/93** MO. **2** DAY **17** YR. **93** ☐ TERMINATION REPORT ☐ FIRST REPORT FOR MONITORED INDIVIDUAL (to be completed by customer)

IDENTIFICATION

1. NAME (LAST, FIRST AND MIDDLE) **STORAGE ROOM** 2. SOCIAL SECURITY NUMBER **_____** 3. SEX **_____** 4. DATE OF BIRTH MO. **_____** DAY **_____** YEAR **_____**

5. NAME OF LICENSEE OR REGISTRANT **CONTINENTAL LABS** 6. EMPLOYER - IF DIFFERENT FROM LICENSEE (COMPLETED BY CUSTOMER) **_____**

7. CITY OR STATE REGISTRATION NUMBER **_____** 8. NRC, AGREEMENT STATE, OR STATE LICENSE **_____**

OCCUPATIONAL EXPOSURE (EXTERNAL)

9. DOSE RECORD FOR **1** CODE: TOTAL BODY (DEEP) - 1 RIGHT WRIST - 5 SKIN OF TOTAL BODY (SHALLOW) - 2 LEFT WRIST - 6 RIGHT HAND - 3 OTHER EXTREMITY - 7 LEFT HAND - 4 OTHER TOTAL BODY - 8 10. METHOD OF MONITORING CODE: FILM/TLD BADGE - 1 SOLID STATE - 4 POCKET CHAMBER - 2 OTHER - 5 CALCULATIONS - 3

11. PERIOD OF EXPOSURE FROM MO. DAY YR. TO MO. DAY YR.	12. X OR GAMMA DOSE FOR THE PERIOD (REM) DECIMAL	13. BETA DOSE FOR THE PERIOD (REM) DECIMAL	14. NEUTRON DOSE FOR THE PERIOD (REM) DECIMAL	15. TOTAL DOSE FOR THE PERIOD (REM) DECIMAL	16. TOTAL LIFETIME ACCUMULATED DOSE (REM) DECIMAL	17. PERMISSIBLE ACC. DOSE (M-18)(REM) DECIMAL	18. UNUSED PART OF PERMISSIBLE ACC. DOSE IN (REM) DECIMAL	19. NUMBER OF BADGES REPORTED
1/10/92 4/09/92	M			M	220			3
4/10/92 7/09/92	M			M	220			3
7/10/92 10/09/92	M			M	220			3
10/10/92 1/09/93	M			M	220			3
YEARLY TOTAL-								

20. INCEPTION DATE OF SERVICE WITH LANDAUER, INC. **4/83** 21. PREVIOUSLY SUPPLIED TOTAL OCCUPATIONAL EXTERNAL RADIATION EXPOSURE HISTORY INCLUDED IN COLUMN 16. DECIMAL **_____** SKIN DOSE EXPOSURE INCLUDES SUM OF X OR GAMMA, BETA AND NEUTRON EXPOSURE. "M" INDICATES EXPOSURE LESS THAN 10 MR.

ESTIMATE OF INTERNAL EXPOSURE (TO BE COMPLETED BY CUSTOMER)

22. PERIOD OF EXPOSURE FROM MO. DAY YR. TO MO. DAY YR.	23. NUCLIDE(S)	24. CRITICAL ORGAN(S)	25. ESTIMATE OF EXPOSURE

CERTAIN REGULATORY AGENCIES REQUIRE THE REPORTING OF ADDITIONAL INFORMATION. THE FOLLOWING SPACE IS PROVIDED FOR YOUR CONVENIENCE IN ADDING THIS DETAIL.

26. OCCUPATIONAL CLASSIFICATION	27. SOURCE OF EXPOSURE	28. CODE NO.	29. CODE NO.
PHYSICIAN - 1	X-RAY - 1		
TECHNICIAN DIRECTED BY PHYSICIAN - 2	RADIOACTIVE MATERIALS - 2		
OTHER - 3	BOTH - 3		
		RMA - 1 - 1	
		RMA - 2 - 2	

This form is for use in place of certain reports required by OSHA, NRC licensees and by state regulations (29CFR1910.96 n, 10CFR19.13 and 10CFR20.401 - 20.409) or for the maintenance of individual personal radiation exposure files and satisfies regulations that require reporting of exposure to employees. It contains the requisite information for NRC FORM - 5, California RH - 2365, Illinois RMA - 1, Nebraska NRH - 2, New Hampshire RCA - 7, Tennessee RHS 8-2, TEXAS TRCR 22.13A, and other similar forms.

This report is furnished to you under the provisions of the Nuclear Regulatory Commission regulation 10 CFR part 19. You should preserve this report for further reference.

OX 3/11

PERMIT OCCUPATIONAL RADIATION EXPOSURE

Prepared by

Landauer

Accredited by the
National Bureau of Standards
through NVLAP

Tech/Ops Landauer, Inc.
2 Science Road, Glenwood, Illinois 60425-1586
(708) 755-7000

ACCOUNT NO. SERIES CODE PARTICIPANT NO.

70639

00030

PREPARATION DATE MO. DAY YR.

2/22/91

TERMINATION REPORT

FIRST REPORT FOR MONITORED INDIVIDUAL (to be completed by customer)

IDENTIFICATION

1. NAME (LAST, FIRST AND MIDDLE)

STORAGE ROOM

2. SOCIAL SECURITY NUMBER

3. SEX

4. MO. DAY YEAR

DATE OF BIRTH

5. NAME OF LICENSEE OR REGISTRANT

CONTINENTAL LABS

6. EMPLOYER - IF DIFFERENT FROM LICENSEE (COMPLETED BY CUSTOMER)

7. CITY OR STATE REGISTRATION NUMBER

8. NRC, AGREEMENT STATE, OR STATE LICENSE

OCCUPATIONAL EXPOSURE (EXTERNAL)

9. DOSE RECORD FOR

CODE:

TOTAL BODY (DEEP)

SKIN OF TOTAL BODY (SHALLOW)

RIGHT HAND

LEFT HAND

1. RIGHT WRIST

2. LEFT WRIST

3. OTHER EXTREMITY

4. OTHER TOTAL BODY

10. METHOD MONITORING

CODE:

FILM BADGE

POCKET CHAMBER

CALCULATIONS

- 1 SOLID STATE

- 2 OTHER

- 3

- 4

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INDUSTRIAL
OCCUPATIONAL
RADIATION
EXPOSURE

Prepared by

Landauer®

Accredited by the
National Bureau of Standards
through NPL

Tech/Ops Landauer, Inc.
2 Science Road, Glenwood, Illinois 60425-1586
(312) 755-7000
After November 11, 1989 use area code (708)

ACCOUNT NO. 70639 SERIES CODE PARTICIPANT NO. 00030 PREPARATION MO. DAY YR. 3/01/90
DATE
TERMINATION REPORT FIRST REPORT FOR MONITORED INDIVIDUAL (to be completed by customer)

IDENTIFICATION
1. NAME (LAST, FIRST AND MIDDLE) STORAGE ROOM
2. SOCIAL SECURITY NUMBER
3. SEX
4. DATE OF BIRTH MO. DAY YEAR
5. NAME OF LICENSEE OR REGISTRANT CONTINENTAL LABS
6. EMPLOYER - IF DIFFERENT FROM LICENSEE (COMPLETED BY CUSTOMER)
7. CITY OR STATE REGISTRATION NUMBER
8. NRC, AGREEMENT STATE, OR STATE LICENSE

OCCUPATIONAL EXPOSURE (EXTERNAL)
9. DOSE RECORD FOR CODE: 1. TOTAL BODY (DEEP) 2. SKIN OF TOTAL BODY (SHALLOW) 3. RIGHT HAND 4. LEFT HAND
10. METHOD OF MONITORING CODE: 1. FILM BADGE 2. POCKET CHAMBER 3. CALCULATIONS 4. SOLID STATE 5. OTHER
11. PERIOD OF EXPOSURE FROM TO MO. DAY YR. MO. DAY YR.
12. X OR GAMMA DOSE FOR THE PERIOD (REM) DECIMAL
13. BETA DOSE FOR THE PERIOD (REM) DECIMAL
14. NEUTRON DOSE FOR THE PERIOD (REM) DECIMAL
15. TOTAL DOSE FOR THE PERIOD (REM) DECIMAL
16. TOTAL LIFETIME ACCUMULATED DOSE (REM) DECIMAL
17. PERMISSIBLE ACC. DOSE (M-18)(REM) DECIMAL
18. UNUSED PART OF PERMISSIBLE ACC. DOSE IN (REM) DECIMAL
19. NUMBER OF BADGES REPORTED
20. INCEPTION DATE OF SERVICE WITH TECH / OPS LANDAUER, INC. 4/83
21. PREVIOUSLY SUPPLIED TOTAL OCCUPATIONAL EXTERNAL RADIATION EXPOSURE HISTORY INCLUDED IN COLUMN 15
22. PERIOD OF EXPOSURE FROM TO MO. DAY YR. MO. DAY YR.
23. NUCLIDE(S)
24. CRITICAL ORGAN(S)
25. ESTIMATE OF EXPOSURE
26. OCCUPATIONAL CLASSIFICATION CODE NO.
27. SOURCE OF EXPOSURE CODE NO.
28. CODE NO.
29. CODE NO.

ESTIMATE OF INTERNAL EXPOSURE (TO BE COMPLETED BY CUSTOMER)
22. PERIOD OF EXPOSURE FROM TO MO. DAY YR. MO. DAY YR.
23. NUCLIDE(S)
24. CRITICAL ORGAN(S)
25. ESTIMATE OF EXPOSURE
26. OCCUPATIONAL CLASSIFICATION CODE NO.
27. SOURCE OF EXPOSURE CODE NO.
28. CODE NO.
29. CODE NO.

CERTAIN REGULATORY AGENCIES REQUIRE THE REPORTING OF ADDITIONAL INFORMATION. THE FOLLOWING SPACE IS PROVIDED FOR YOUR CONVENIENCE IN ADDING THIS DETAIL.
26. OCCUPATIONAL CLASSIFICATION CODE NO.
27. SOURCE OF EXPOSURE CODE NO.
28. CODE NO.
29. CODE NO.

This form is for use in place of certain reports required by OSHA, NRC licensees and by state regulations (29CFR1910.96 n, 10CFR19.13 and 10CFR20.401 - 20.409) or for the maintenance of individual personal radiation exposure files and satisfies regulations that require reporting of exposure to employees. It contains the requisite information for NRC FORM - 5, California RH - 2385, Illinois RMA - 1, Nebraska NRH - 2, New Hampshire RCA - 7, Tennessee RHS 8-2, TEXAS TRCR 22.13A, and other similar forms.
This report is furnished to you under the provisions of the Nuclear Regulatory Commission regulation 10 CFR part 19. You should preserve this report for further reference.

RIA WASTE DISPOSAL RECORDS

	Date of storage	Initial reading	Final reading	Date of disposal	Barrel	Date of storage	Initial reading	Final reading	Date of disposal
210	3-27-91	NO.3 MRH/HR (CW)	NO.3 MRH/HR	7/27/92	235	2/19/92	NO.3 MRH/HR (CW)	NO.3 MRH/HR	4/4/93 CW
211	4-8-91	NO.3 MRH/HR (CW)			236	3/9/92	NO.3 MRH/HR (CW)	NO.3 MRH/HR	5/4/93
212	4-15-91	NO.3 MRH/HR (CW)			237	3/17/92	NO.3 MRH/HR (CW)		
213	4-24	NO.3 MRH/HR (CW)			238	4/7/92	NO.3 MRH/HR (CW)	NO.3 MRH/HR 220 cpm Tube	1-22-94 CW
214	5-1-91	NO.3 MRH/HR (CW)			239	4/27/92	NO.3 MRH/HR (CW)		
215	5-9-91	NO.3 MRH/HR (CW)			240	5/14/92	NO.3 MRH/HR (CW)	NO.3 MRH/HR	3/31/94 CW
216	5-21-91	NO.3 MRH/HR (CW)			241	6/4/92	NO.3 MRH/HR (CW)		
217	6-5-91	NO.3 MRH/HR (CW)			242	6/25/92	NO.3 MRH/HR (CW)		
218	6-30-91	NO.3 MRH/HR (CW)			243	7/13/92	NO.3 MRH/HR (CW)		
219	7-5-91	NO.3 MRH/HR (CW)			244	7/29/92	NO.3 MRH/HR (CW)	NO.3 MRH/HR	7/27/94 CW
220	7-24-91	NO.3 MRH/HR (CW)			245	8/18/92	NO.3 MRH/HR (CW)	220 cpm Per Tube	
221	8-9-91	NO.3 MRH/HR (CW)			246	9/10/92	NO.3 MRH/HR (CW)	NO.3 MRH/HR	11/25/94 CW
222	8-26-91	NO.3 MRH/HR (CW)			247	9/29/92	NO.3 MRH/HR (CW)		
223	9-4-91	NO.3 MRH/HR (CW)			248	10/19/92	NO.3 MRH/HR (CW)		
224	9-18-91	NO.3 MRH/HR (CW)		7/29/92 CW	249	11/3/92	NO.3 MRH/HR (CW)	NO.3 MRH/HR	6/21/95 CW
225	10-9-91	NO.3 MRH/HR (CW)	NO.3 MRH/HR	8/27/92 CW	250	11/27/92	NO.3 MRH/HR (CW)		
226	10-16-91	NO.3 MRH/HR (CW)			251	12/1/92	NO.3 MRH/HR (CW)		
227	11-6-91	NO.3 MRH/HR (CW)	NO.3 MRH/HR	10/19/92	252	12/13/92	NO.3 MRH/HR (CW)		
228	11-8-91	NO.3 MRH/HR (CW)			253	1/1/93	NO.3 MRH/HR (CW)	NO.3 MRH/HR	10/30/95 CW
229	11/29/91	NO.3 MRH/HR (CW)			254	1/11/93	NO.3 MRH/HR (CW)	NO.3 MRH/HR	10/30/95 CW
230	12-18-91	NO.3 MRH/HR (CW)	NO.3 MRH/HR	12/8/92	255	2/17/93	NO.3 MRH/HR (CW)		
231	1-2-92	NO.3 MRH/HR (CW)			256	3/26/93	NO.3 MRH/HR (CW)		
232	1-14-92	NO.3 MRH/HR (CW)			257	4/21/93	NO.3 MRH/HR (CW)		
					258	5/19/93	NO.3 MRH/HR (CW)	NO.3 MRH/HR	3/22/96 CW
233	1-30-92	NO.3 MRH/HR (CW)	NO.3 MRH/HR	1/4/93 CW	259	8/19/93	NO.3 MRH/HR (CW)		
234	2-10-92	NO.3 MRH/HR (CW)			260	10/25/93	NO.3 MRH/HR (CW)		
					261	11/20/93	NO.3 MRH/HR (CW)		

RIA WASTE DISPOSAL REC

Ba	Date of storage	Initial reading	Final reading	Date of disposal	Barrel	Date of storage	Initial reading	Final reading	Date of disposal
262	1-20-94	no. 3 mR/h CFW	2000 cpm CFW	7/16/96					
263	3-14-94	no. 3 mR/h CFW	2100 cpm CFW	7/24/96					
264	5-12-94	no. 3 mR/h CFW	2100 cpm CFW	7/25/96					
265	5/27/94	no. 3 mR/h CFW							
266	11/27/94	no. 3 mR/h CFW							
267	11/26/94	no. 3 mR/h CFW							
268	11/23/94	no. 3 mR/h CFW							
269	1/25/95	no. 3 mR/h CFW							
270	3/16/95	no. 3 mR/h CFW							
271	5/5/95	no. 3 mR/h CFW							
272	6/19/95	no. 3 mR/h CFW							
273	7/12/95	no. 3 mR/h CFW							
274	8/30/95	no. 3 mR/h CFW							
275	10/11/95	no. 3 mR/h CFW							
276	11/14/95	no. 3 mR/h CFW							
277	12/21/95	no. 3 mR/h CFW							
278	1/31/96	no. 3 mR/h CFW							
279	4/11/96	no. 3 mR/h CFW							
280	5/17/96	no. 3 mR/h CFW							
281	7/16/96	no. 3 mR/h CFW							

RADIOACTIVITY CONTAMINATION MONITORING RECORD - Survey Meter
 ACCEPTABLE VALUE $< 0.2 \text{ mrem/hr}$ or $< 100 \text{ cpm}$

DATE	BAT	¹³⁷ Cs 100-300 CPM	Tech	REF RIA	Tech	Prime St Storage Room Shed	Date	Tech	Sink #1 South	Sink #2 North	Discarded Waste
6/21/93	out for calibration		CRW			19 Barrels OK CRW	6/21	CRW			
7/7/93	OK	~240 cpm	CRW	<100	CRW	19 Barrels all OK $< 0.2 \text{ mrem/hr}$	7/7/93	CRW	<100	<100	
7-21-93	OK	~240 cpm	CRW	<100	CRW	19 Barrels all OK $< 0.2 \text{ mrem/hr}$	7/21	CRW	<100	<100	
7/26/93	OK	~240 cpm	CRW	<100	CRW	19 Barrels all OK $< 0.2 \text{ mrem/hr}$	7/26	CRW	<100	<100	
8/1/93	OK	~240 cpm	CRW	<100	CRW	19 Barrels all OK $< 0.2 \text{ mrem/hr}$	8/1	CRW	<100	<100	
8/1/93	OK	~240 cpm	CRW	<100	CRW	19 Barrels all OK $< 0.2 \text{ mrem/hr}$	8/11	UN	<100	<100	
8-10-93	OK	~240 cpm	CRW	<100	CRW	21 Barrels all OK $< 0.2 \text{ mrem/hr}$	8/10	CRW	<100	<100	
8-24	OK	~240 cpm	CRW	<100	CRW	21 Barrels all OK $< 0.2 \text{ mrem/hr}$	8/24	CRW	<100	<100	
8-30	OK	~240 cpm	CRW	<100	CRW	21 Barrels all OK $< 0.2 \text{ mrem/hr}$	8/30	CRW	<100	<100	
9-8	OK	~240 cpm	CRW	<100	CRW	21 Barrels all OK $< 0.2 \text{ mrem/hr}$	9/8/93	CRW	<100	<100	
9/13/93	OK	~240 cpm	CRW	<100	CRW	21 Barrels all OK $< 0.2 \text{ mrem/hr}$	9/13/93	CRW	<100	<100	
9/21	OK	~240 cpm	CRW	<100	CRW	21 Barrels all OK $< 0.2 \text{ mrem/hr}$	9/21/93	CRW	<100	<100	
9/30/93	OK	~240 cpm	CRW	<100	CRW	21 Barrels all OK $< 0.2 \text{ mrem/hr}$	9/30	CRW	<100	<100	
10/6/93	OK	~240 cpm	CRW	<100	CRW	21 Barrels all OK $< 0.2 \text{ mrem/hr}$	10/6	CRW	<100	<100	
10/11/93	OK	~240 cpm	CRW	<100	CRW	21 Barrels all OK $< 0.2 \text{ mrem/hr}$	10/11/93	CRW	<100	<100	
10/19/93	OK	~240 cpm	CRW	<100	CRW	21 Barrels all OK $< 0.2 \text{ mrem/hr}$	10/24/93	CRW	<100	<100	
10/27/93	OK	~240 cpm	CRW	<100	CRW	23 Barrels all OK $< 0.2 \text{ mrem/hr}$	10/27/93	CRW	<100	<100	
11/9/93	OK	~240 cpm	CRW	<100	CRW	23 Barrels all OK $< 0.2 \text{ mrem/hr}$	11/4/93	CRW	<100	<100	
11/8/93	OK	~240 cpm	CRW	<100	CRW	23 Barrels all OK $< 0.2 \text{ mrem/hr}$	11/4/93	CRW	<100	<100	
11/15	OK	~240 cpm	CRW	<100	CRW	23 Barrels all OK $< 0.2 \text{ mrem/hr}$	11/18	CRW	<100	<100	
11/24	OK	~240 cpm	CRW	<100	CRW	23 Barrels all OK $< 0.2 \text{ mrem/hr}$	11/26	CRW	<100	<100	
12-2	OK	~240 cpm	CRW	<100	CRW	23 Barrels all OK $< 0.2 \text{ mrem/hr}$	12/2	CRW	<100	<100	
12-1	OK	~240 cpm	CRW	<100	CRW	23 Barrels all OK $< 0.2 \text{ mrem/hr}$	12/1/93	CRW	<100	<100	
12-4	OK	~240 cpm	CRW	<100	CRW	23 Barrels all OK $< 0.2 \text{ mrem/hr}$	12/15	CRW	<100	<100	
12-11	OK	~240 cpm	CRW	<100	CRW	23 Barrels all OK $< 0.2 \text{ mrem/hr}$	12/21	CRW	<100	<100	
1-8-94	OK	~240 cpm	CRW	<100	CRW	23 Barrels all OK $< 0.2 \text{ mrem/hr}$	1/2/94	CRW	<100	<100	

Packard Gamma Counter

PACKARD FUNCTIONS

ISOTOPE

TEST

-BACKGROUND

Z-DEVIATION

EFFICIENCY

chi-SQUARE

1.18

< 1.0

< 2.00

> 70

7.63-36.19

FREQUENCY

EACH DAY

USED

weekly

DATE	TEST	1	2	3	4	5	6	7	8	9	10	TECH
7-31	BG	218	15	14	16	28	18	20	13	11	18	ck
	Dev	.18	.01	-.03	-.04	-.21	-.18	.17	-.16	-.10	.25	
	Eff	780.7										
	X ²											
8-1	BG	19	17	22	16	38	20	18	18	21	20	Jmw
	Dev	.04	.09	-.05	-.05	-.19	-.04	-.18	-.17	-.04	.20	
	Eff	780.8										
	X ²											
8-2	BG	27	19	9	16	42	21	18	11	13	18	ck
	Dev	.02	.05	-.02	-.28	.18	-.09	.39	-.12	.00	-.13	
	Eff	780.8										
	X ²											
8-5	BG	17	25	18	18	25	27	14	12	11	12	mw
	Dev	.07	.36	-.04	-.41	.03	.03	.23	.05	-.19	-.07	
	Eff	780.6%										
	X ²	17.3	24.0	19.1	13.8	27.9	11.6	15.5	11.0	22.7	13.4	
8-6	BG	16	12	18	12	52	25	18	15	19	21	mw
	Dev	.35	.27	-.16	-.31	-.09	-.18	.35	-.29	-.02	.01	
	Eff	782.0%										
	X ²											
8-7	BG	19	19	12	17	33	20	18	20	17	15	mw
	Dev	.04	.15	-.14	-.24	.18	-.10	.37	-.18	-.12	.04	
	Eff	780.7%										
	X ²											
8-8	BG	23	28	17	13	34	29	23	12	19	13	mw
	Dev	.05	.07	.01	.05	-.15	.16	.16	-.18	-.26	.04	
	Eff	780.6%										
	X ²											
8-9	BG	21	18	9	18	36	20	19	19	16	17	mw
	Dev	.02	.17	-.07	-.18	.11	-.17	.33	-.22	.07	-.07	
	Eff	780.8%										
	X ²											
8/12/96	BG	18	22	12	17	35	23	18	22	15	25	ck
	Dev	.13	.15	-.04	-.19	.05	-.10	.22	-.20	.19	-.00	
	Eff	780.8%										
	X ²											
8/13/96	BG	23	15	16	14	19	13	18	27	33	13	ck
	Dev	.27	.16	-.24	-.37	-.00	.05	.33	-.03	-.01	-.02	
	Eff	780.6%										
	X ²											
8/14/96	BG	19	15	15	8	49	28	15	28	12	24	ck
	Dev	-.01	.21	.07	-.31	-.16	.18	.04	-.20	-.03	.17	
	Eff	780.8%										
	X ²											
8/15/96	BG	17	18	11	19	41	23	15	16	14	17	ck
	Dev	.17	-.06	-.28	-.23	.07	.14	.59	-.26	-.09	-.02	
	Eff	780.6%										
	X ²											
8/16/96	BG	13	13	25	11	45	16	25	17	16	13	ck
	D	.00	.05	.01	-.25	.16	-.27	.28	-.10	-.04	-.14	
	Eff	780.8%										
	X ²											
8-16	BG	19	16	14	18	41	21	15	6	19	16	ck
	Dev	.12	.01	-.02	.06	.00	.29	-.30	-.16	.02	.12	
	Eff	780.8%										
	X ²											
		136	21.9	31.9	18.7	21.3	27.9	15.2	16.8	17.9	28.8	OK

17 Sep 96

07:44

NORMALIZATION REPORT

Page #1

Packard Instrument Company

Sample Calibration of the Packard Gamma Counter

Nuclide: I-125

Det#	Elev Pos#1		Elev Pos#2		Elev Pos#3		Elev Pos#4		%Eff	Message
	%Dev	%Sigma	%Dev	%Sigma	%Dev	%Sigma	%Dev	%Sigma		
1	-0.09	.245	0.10	.246	0.05	.248	0.02	.236	80.92	
2	0.04	.245	0.34	.245	0.44	.250	0.42	.240	81.02	
3	0.54	.244	0.07	.244	-0.12	.248	0.17	.238	81.43	
4	0.12	.245	-0.10	.245	0.18	.247	-0.34	.235	81.09	
5	-0.15	.245	-0.03	.246	0.28	.250	0.04	.242	80.87	
6	0.03	.246	-0.21	.247	-0.07	.251	-0.06	.242	81.01	
7	-0.15	.245	0.12	.244	0.05	.246	-0.28	.235	80.87	
8	-0.09	.245	0.00	.246	-0.16	.250	0.34	.241	80.92	
9	-0.38	.245	-0.23	.245	-0.03	.250	-0.32	.242	80.68	
10	0.13	.245	-0.06	.246	-0.60	.251	0.01	.244	81.10	

Optimum Elevator Position : 1

SPILLUP CORRECTION FACTOR REPORT

Elev Pos#1	Elev Pos#2	Elev Pos#3	Elev Pos#4
0.2	0.2	0.2	0.2

8622

Certificate of Instrument Calibration
and
Certificate of Compliance

This is to certify that

Description SURFACE MONITOR

Model TBM-35

Serial 11944

was calibrated on

Date 8-8-95

Except as noted below, this instrument now meets the manufacturer's tolerance of $\pm 10\%$ F.S. Source used for calibration is traceable to NBS. The isotope used was Cs-137. The instrument was calibrated at an ambient temperature of 60-80° and includes a background reading of 0.02 mR/hr.

Calibration is performed in conformance with recommendations of the U.S. Nuclear Regulatory Commission, and in agreement with State regulations and of the International Commission of Radiation Protection. Ref: 1. U.S. Nuclear Regulatory Comm. RG8.21 Section 1.12, and, 2. California ADM. Code, Title 17, Section 30332(c)(1), also N-323-1978.

Two points were checked at each scale; one point in the lower 25% of the scale and one point in the upper 25%. Adjustments have been made so that the instrument reads within the above accuracy on all ranges when compared to true dose rate, unless noted below. Analog instruments reading in counts/minutes are calibrated against a pulse generator traceable to the NBS in addition to checking against a calibrated radiation source.

Cal source is encapsulated in stainless steel and is overcoated with 1/4" low Z material to minimize any bremsstrahlen effect.

Cal source is axial to detector window.
Reading from side is reduced by factor 2.

Comments:

Calibration Technician: WV

Approved by: LB

Purchase Order: _____

Property of: MET PATH OF MICHIGAN

TA

TECHNICAL ASSOCIATES

7051 ETON AVENUE • CANOGA PARK CA 91303 • TELEPHONE 818-883-7043 • FAX 818 863-6103

Certificate of Instrument Calibration
and
Certificate of Compliance

This is to certify that

Description Surface monitor
Model TBM-135
Serial 11944

was calibrated on

Date 8/15/96

Except as noted below, this instrument now meets the manufacturer's tolerance of +10 % F.S. Source used for calibration is traceable to NIST. The isotope used was CS-137. The instrument was calibrated at an ambient temperature of 60-80° and includes a background reading of 0.02 mR/hr.

Calibration is performed in conformance with recommendations of the U.S. Nuclear Regulatory Commission and in agreement with State regulations and of the International Commission of Radiation Protection. Ref. 1. U.S. Nuclear Regulatory Comm. RG8.21 Section 1.12, and 2. California A.C.A. Code, Title 17, Section 30332(c)(1), also N-323-1978.

Two points were checked at each scale, one point in the lower 25% of the scale and one point in the upper 25%. Adjustments have been made so that the instrument reads within the above accuracy on all ranges when compared to true dose rate unless noted below. Analog instruments reading in counts/minute are calibrated against a pulse generator traceable to the NIST in addition to checking against a calibrated radiation source.

Cal source is encapsulated in stainless steel and is overcoated with 1/4" low Z material to minimize any bremsstrahlen effect.

Cal source is axial to detector window
Reading from side is reduced by factor 2

Comments:

Calibration Technician: [Signature]
Approved by: [Signature]
Purchase Order: 023751
Property of: Corning Clinical Lab

TA

TECHNICAL ASSOCIATES

7051 ETON AVENUE • CANOGA PARK, CA 91303 • TELEPHONE 818-883-7043 • FAX 818-883-6103

CALIBRATION DATA SHEET

Instrument Owner: Corning Clinical Lab

Date Data Taken: 8/15/96

Instrument Model #: TBm-35

Taken By: VJH

Instrument Serial #: 11944

T/A Ref #: R8950

Linear Instrument Range Switch Position	Log Instrument Decade	Exposure	Reading As Received	Reading As Corrected	Correction Factor
x 1		Background	<u>0.02</u> mR	<u>0.02</u> mR	
x 1		.1 mR	<u>.12</u> mR	<u>.12</u> mR	
x 10		.5 mR	<u>.3</u> mR	<u>.5</u> mR	
x 10		1 mR	<u>.8</u> mR	<u>1</u> mR	
x 100		5 mR	<u>4</u> mR	<u>5</u> mR	
x 100		10 mR	<u>8.5</u> mR	<u>10</u> mR	
x 1000					
x 1000					

NOTE: For linear instruments, two readings to be taken per range.
For log instruments, two readings per decade.

CHECK SOURCE READING: Yone

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Craig Longstreet
Corning Clinical Laboratories
2740 28th Street, S.W.
Grand Rapid, MI 49509

Dear Mr. Longstreet:

Enclosed is Amendment No. 03 to your NRC Material License No. 21-19011-01 in accordance with your request.

Please review the enclosed document carefully and be sure that you understand all conditions. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region III office at (630) 829-9887 so that we can provide appropriate corrections and answers.

Please be advised that your license expires at the end of the day, in the month, and year stated in the license. Unless your license has been terminated, you must conduct your program involving byproduct materials in accordance with the conditions of your NRC license, representations made in your license application, and NRC regulations. In particular, note that you must:

1. Operate in accordance with NRC regulations 10 CFR Part 19, "Notices, Instructions and Reports to Workers; Inspections," 10 CFR Part 20, "Standards for Protection Against Radiation," and other applicable regulations.
2. Notify NRC, in writing, within 30 days:
 - a. When the Radiation Safety Officer permanently discontinues performance of duties under the license or has a name change; or
 - b. When the licensee's mailing address changes (no fee is required if the location of byproduct material remains the same).
3. In accordance with 10 CFR 30.36(b) and/or license condition, notify NRC, promptly, in writing, and request termination of the license when you decide to terminate all activities involving materials authorized under the license.
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 - a. Change Radiation Safety Officers;
 - b. Order byproduct material in excess of the amount, or radionuclide, or form different than authorized on the license;

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- c. Add or change the areas of use or address or addresses of use identified in the license application or on the license; or
- d. Change ownership of your organization.
5. Submit a complete renewal application with proper fee or termination request at least 30 days before the expiration date of your license. You will receive a reminder notice approximately 90 days before the expiration date. Possession of byproduct material after your license expires is a violation of NRC regulations. A license will not normally be renewed, except on a case-by-case basis, in instances where licensed material has never been possessed or used.

In addition, please note that NRC Form 313 requires the applicant, by his/her signature, to verify that the applicant understands that all statements contained in the application are true and correct to the best of the applicant's knowledge. The signatory for the application should be the licensee or certifying official rather than a consultant.

You will be periodically inspected by NRC. Failure to conduct your program in accordance with NRC regulations, license conditions, and representations made in your license application and supplemental correspondence with NRC will result in enforcement action against you. This could include issuance of a notice of violation, or imposition of a civil penalty, or an order suspending, modifying or revoking your license as specified in the General Policy and Procedures for NRC Enforcement Actions. Since serious consequences to employees and the public can result from failure to comply with NRC requirements, prompt and vigorous enforcement action will be taken when dealing with licensees who do not achieve the necessary meticulous attention to detail and the high standard of compliance which NRC expects of its licensees.

Sincerely,

Original Signed By
W. P. Reichhold
Nuclear Materials Licensing Branch

License No.: 21-19011-01
Docket No.: 030-15207

Enclosure: Amendment No. 08

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