

Schoolcraft Memorial Hospital

David B. Jahn
ADMINISTRATOR

PHONE (906) 341-2163
500 MAIN STREET
MANISTIQUE, MICHIGAN 49854

February 9, 1986

Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

ATTN: Mr. W. P. Reichhold

Dear Mr. Reichhold:

This is response to the letter dated September 27, 1985 from J. A. Hind. Regarding Item 1A, a repeat violation of our linearity checks, we are taking the following steps to ensure this does not happen again:

1. A linearity check will be done quarterly in our Nuclear Medicine Department;
2. Records will be checked by the Radiation Safety Officer before they will be submitted to the Radiation Safety Committee at our quarterly meeting;
3. The Radiation Safety Committee will meet with the Utilization Review Board on the last Monday of each month.

The above steps to correct our violation may be subject to change since our radiologists will be retiring. The responsibilities of the Nuclear Medicine Department will be taken over by our new radiologist, who may want to make some changes.

In response to our management control system I would like to inform you that the duties and responsibilities of all persons involved in the license activity will have adequate training and, also, will be supervised by the radiologist or by the appointed Radiation Safety Officer. This will not be the responsibility of one person. It will be the responsibility of the Radiation Safety Officer and the Radiation Safety Committee to appoint these people to take charge of the department. There will be a trained Nuclear Medicine Tech in the Nuclear Medicine Department with a physician or radiologist to oversee all activities of the Nuclear Medicine Department. Also, we will have a radiation physicist attend to the department at least twice a year. Mr. Ron Scheele, a radiation physicist from Green Bay, has agreed to come and do the surveys for the hospital at our request. Mr. Jahn, the Administrator of Schoolcraft Memorial Hospital, will also be involved in the management control of the Nuclear Medicine Department.

Following are specific responses to violations enumerated in Appendix A:

- 1a. We have received our Picker dose calibrator back from repair, but have not done a linearity check on this dose calibrator because we have not received any isotopes from Mallinckrodt or any other company for our department has been closed since your inspection;

8603040306 860226
REG3 LIC30
21-16542-02 PDR

FEB 18 1986

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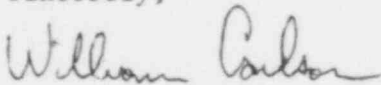
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- 1b. We will be doing a constancy check on our dose calibrator to check all of our settings with our cesium source. A copy of this report is attached.
4. Radiation Isotope Committee: I have talked to Mr. Jahn and he has assured me that the Radiation Safety Committee will meet quarterly at the Utilization Review Board Meeting and he will see that this is included at this meeting.
8. I have received the calibration on our other GM meter and our Victoreen meter and a copy of the findings will be included in this letter.

If you have any questions about, or need clarification of, any of my responses, please feel free to contact me.

Sincerely,



William Carlson, R.T.R.
Department Head
Radiology

WC/cs

Enc.

cc: Mr. David Jahn, Administrator

SCHOOLCRAFT MEMORIAL HOSPITAL.

PICKER MODEL 655-136 (#173).

14 SEP 85.

SCALE

CALCULATED mR/hr

MEASURED mR/hr

x 0.01

# 1028 @ 600cm	0.12	0.12
@ 500cm	0.17	0.16

x 0.1

#1028 @ 225cm	0.8	0.9
@ 175cm	1.4	1.5

x 1.0

# 1028 @ 75cm	7.5	8.4
@ 50cm	17	17.5

x 10

# 0053 @ 75cm	59	65
@ 45cm	164	162

x 100

#0052+0054 @ 50cm	265	500
@ 40cm	415	780
@ 30cm	737	1400

SCALE.

CALIBRATION FACTOR

x 0.01	1.04
x 0.1	0.93
x 1.0	0.97
x 10	0.91
x 100	0.53

CESM DECIM.

14 JUN 85 → 14 SEP 85 92 DAYS DECIM = 0.9942

#1028- 5.17 m² × 8.25 Rcm²/m²HR × 0.9942 = 42.4 Rcm²/HR

0053- 40.4 m² × 8.25 Rcm²/m²HR × 0.9942 = 331.4 Rcm²/HR

0054- 40.5 m² × 8.25 Rcm²/m²HR × 0.9942 = 332.2 Rcm²/HR

1028 @ 600 CM = 0.12 mR/HR

@ 500 CM = 0.17 mR/HR

@ 225 CM = 0.8 mR/HR

@ 175 CM = 1.4 mR/HR

@ 75 CM = 7.5 mR/HR

@ 50 CM = 17 mR/HR

0053 @ 100 CM = 33 mR/HR

@ 75 CM = 57 mR/HR

@ 50 CM = 133 mR/HR

@ 45 CM = 164 mR/HR

0053+0054 @ 50 CM = 265 mR/HR

@ 40 CM = 415 mR/HR

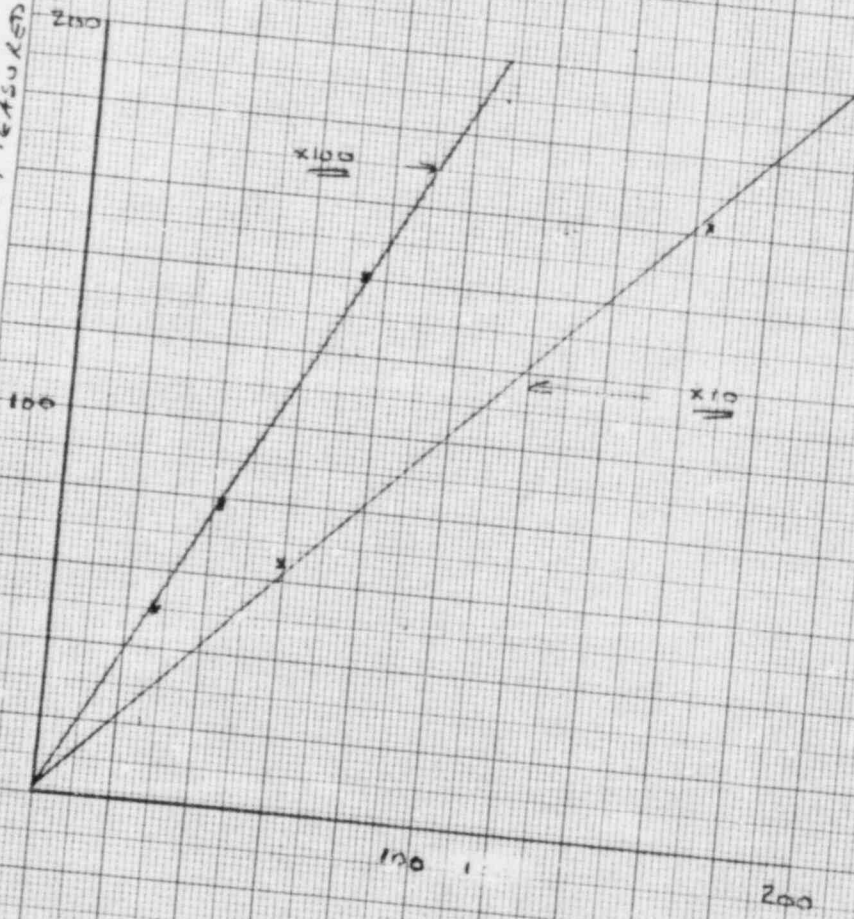
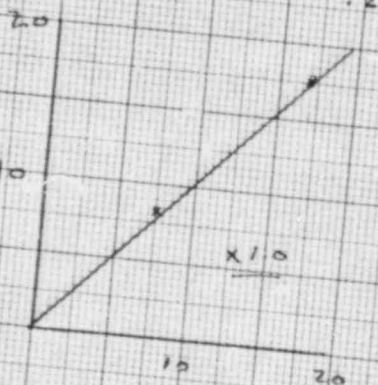
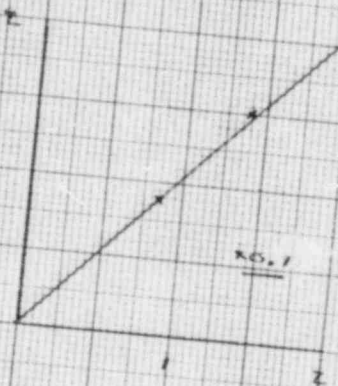
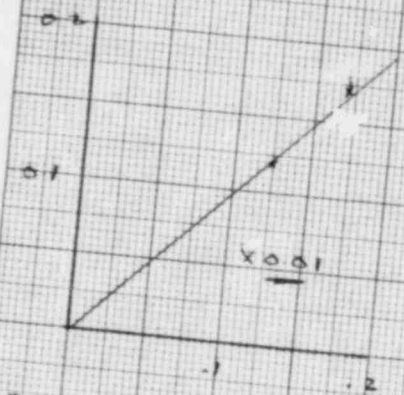
@ 30 CM = 737 mR/HR

14 SEP 85

R.S.

46 1513

MEASURED HR/HR



CALCULATED HR/HR

14 SEP 85
RE

SCHOOLCRAFT MEMORIAL HOSPITAL

10-17-85

CDU-715 (# 66264)

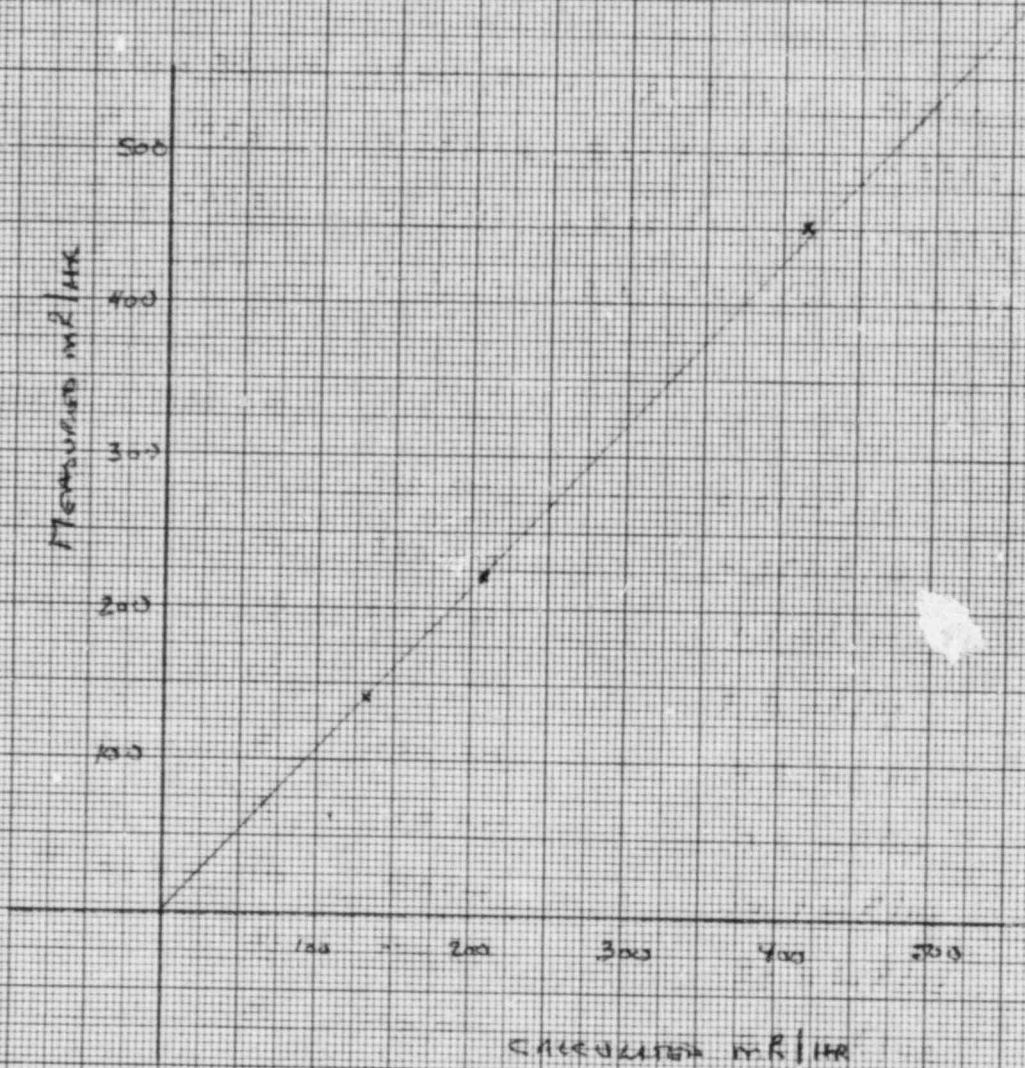
<u>SCALE</u>	<u>CALCULATED MR/HK</u>	<u>MEASURED MR/HK</u>
<u>X0.1</u>		
#0054 @ 50	133	140
@ 40	207	220
#0054 + #0053 @ 40	414	450

<u>X1</u>		
#0054 + #0053 @ 35	540	500

<u>SCALE</u>	<u>CORRECTION FACTOR</u>
X0.1	0.94
X1.	1.08*

* ONLY ONE POINT MEASURED

SCHMIDT MEMORIAL HOSPITAL
COVINGTON (466264)



19-OCT-85
RS

CESIUM DECAY

14 JUN 85 → 19 OCT 85 = 127 DAYS DECAY = 0.992

1035 - 5.25 ML x 8.25 RCM²/ML/HR = 0.992 = 43.0 RCM²/HR

0053 40.4 ML x 8.25 RCM²/ML/HR = 0.992 = 330.6 RCM²/HR

0054 40.5 ML x 8.25 RCM²/ML/HR = 0.992 = 331.5 RCM²/HR

1035 @ 600 CM = 0.12 MR/HR

@ 450 CM = 0.21 MR/HR

@ 350 CM = 0.35 MR/HR

@ 200 CM = 1.1 MR/HR

@ 125 CM = 2.8 MR/HR

@ 100 CM = 4.3 MR/HR

@ 75 CM = 7.6 MR/HR

0054 @ 150 CM = 14.7 MR/HR

@ 120 CM = 23.0 MR/HR

@ 100 CM = 33 MR/HR

@ 75 CM = 59 MR/HR

@ 65 CM = 78 MR/HR

@ 50 CM = 133 MR/HR

@ 40 CM = 207 MR/HR

0054 + 0053 @ 50 CM = 265 MR/HR

@ 40 CM = 414 MR/HR

@ 35 CM = 540 MR/HR