

MS-12  
P.5

HOWARD UNIVERSITY

WASHINGTON, D.C. 20059

April 15, 1983

OFFICE OF THE VICE PRESIDENT  
FOR HEALTH AFFAIRS  
Radiation Safety Committee

"OFFICIAL RECORD COPY"

John E. Glenn, Ph.D., Chief  
Nuclear Materials Section B  
Division of Engineering and  
Technical Programs  
U.S. Nuclear Regulatory Commission  
Region I  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

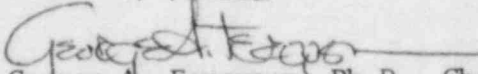
Dear Dr. Glenn:

I have enclosed our response to the request contained in your February 16, 1983 letter concerning the review of our renewal application (License No. 08-03075-07). This response provides evidence that survey instruments are calibrated using a NBS traceable gamma source and states the accuracy of this source.

If additional information is needed to complete your review, I shall be pleased to supply it upon your request.

I am,

Sincerely yours,

  
George A. Ferguson, Ph.D., Chairman  
Howard University Radiation Safety  
Committee

GAF:dmr

Enclosures

8505300688 850503  
REQ1 LIC30  
08-03075-07 PDR

07493

APR 18 1983

RESPONSE TO NRC LETTER DATED February 16, 1983  
LICENSE NO. 08-03075-07  
DOCKET NO. 030-01321  
CONTROL NO. 07493

All of the gamma sensitive survey instruments are calibrated using a 100 millicurie Cesium-137, Amersham X.8 Capsule Source (Serial Number 7863 GM) (This source was assayed on March 29, 1983 and the manufacturer has quoted a calibration accuracy of  $\pm 5\%$  and that this calibration is directly traceable to a NBS primary standard.) (See attachment). The source is mounted in a J.L. Shepherd and Associates Model 28-5 Calibrator (Serial Number 10091).

## CALIBRATION CERTIFICATE

TO: Howard University Hospital

P.O.# HUH833264

SOURCE: 100mCi Cs-137 Amersham X.8 Capsule S.N. 7863 GM

MOUNTING: J.L. Shepherd & Associates Model 28-5 Calibrator S.N. 10091

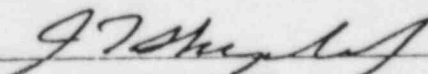
INSTRUMENT: All calibration is done with MDH, Model 2025. This meter is calibrated by MDH Industries, Inc. and its calibration is directly traceable to National Bureau of Standards.

POSITION: Centered in Beam Port

DISTANCE: 60 centimeters

OUTPUT: 113 mR/hr

DATE: March 28, 1983

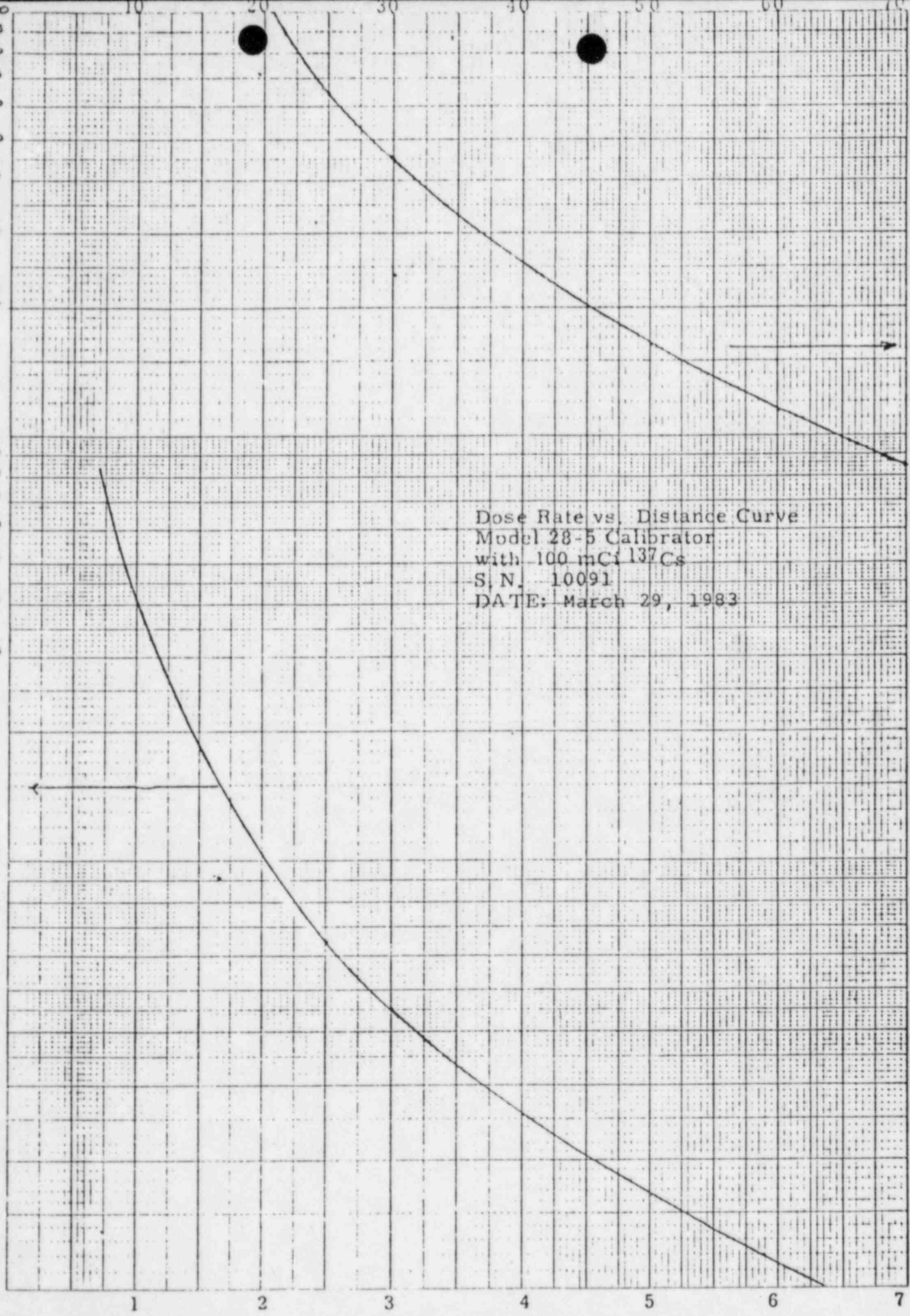
  
J.L. SHEPHERD

465810

Dose Rate in mR/hr

Distance from source centerline in meters

Dose Rate vs. Distance Curve  
Model 28-5 Calibrator  
with 100 mCi  $^{137}\text{Cs}$   
S. N. 10091  
DATE: March 29, 1983



## ATTENUATOR CERTIFICATION

TO: Howard University Hospital

DEVICE: J.L. Shepherd & Associates Model 28-5 Calibrator S.N. 10091  
with 100mCi Cs-137 Amersham X.8 Capsule S.N. 7863 GMNOMINALACTUAL

X-2

X-2.08

X-4

X-4.39

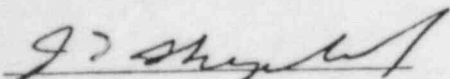
X-10

X-10.9

X-100

X-108

All Calibration using attenuators should be made at greater than or equal to one (1) meter source detection distance.

  
J.L. Shepherd

DATE: March 28, 1983