

Bedford Regional Medical Center

A Methodist Hospital Affiliate

GATTONE

June 21, 1996

U. S. Nuclear Regulatory Commission
Attn.: Document Control Desk
Washington, D. D. 20555

RE: Reply to Violation
License No. 13-14823-01

To Whom This May Concern:

I am responding to notice of the violation letter of June 12, 1996 addressed to John Birdsell, CEO.

REASON FOR VIOLATION:

Our primary radiation detection survey meter (Model #14C, serial #51342, Model #447, Serial # RN011182) was malfunctioning. We contacted Ludlum Measurements, Inc. and we sent the instrument for repairs on April 16, 1996. Our secondary radiation detection survey meter, Victoreen Model #CDV-700, Serial #74250 was used from April 16, 1996 through May 22, 1996 while previously mentioned survey meter was repaired.

THREE CORRECTIVE STEPS TAKEN:

Upon notice of our violation with Victoreen survey meter, May 22, 1996, a new Ludlum survey meter was ordered. The new Ludlum is model 14C, serial #129632, Model #44-7, serial #PR133492 and it arrived on June 17, 1996. The Ludlum model puts us in full compliance with 10CFR35.220. The Victoreen survey meter that was in

9607240115 960716
PDR ADDCK 03008108
C PDR

JUL 02 1996

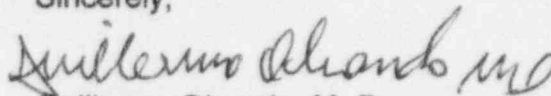
U. S. Nuclear Regulatory Commission

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June 21, 1996

violation has been discarded. We are including documentation on the new Ludlum radiation detector survey meter as evidence of our compliance.

Sincerely,

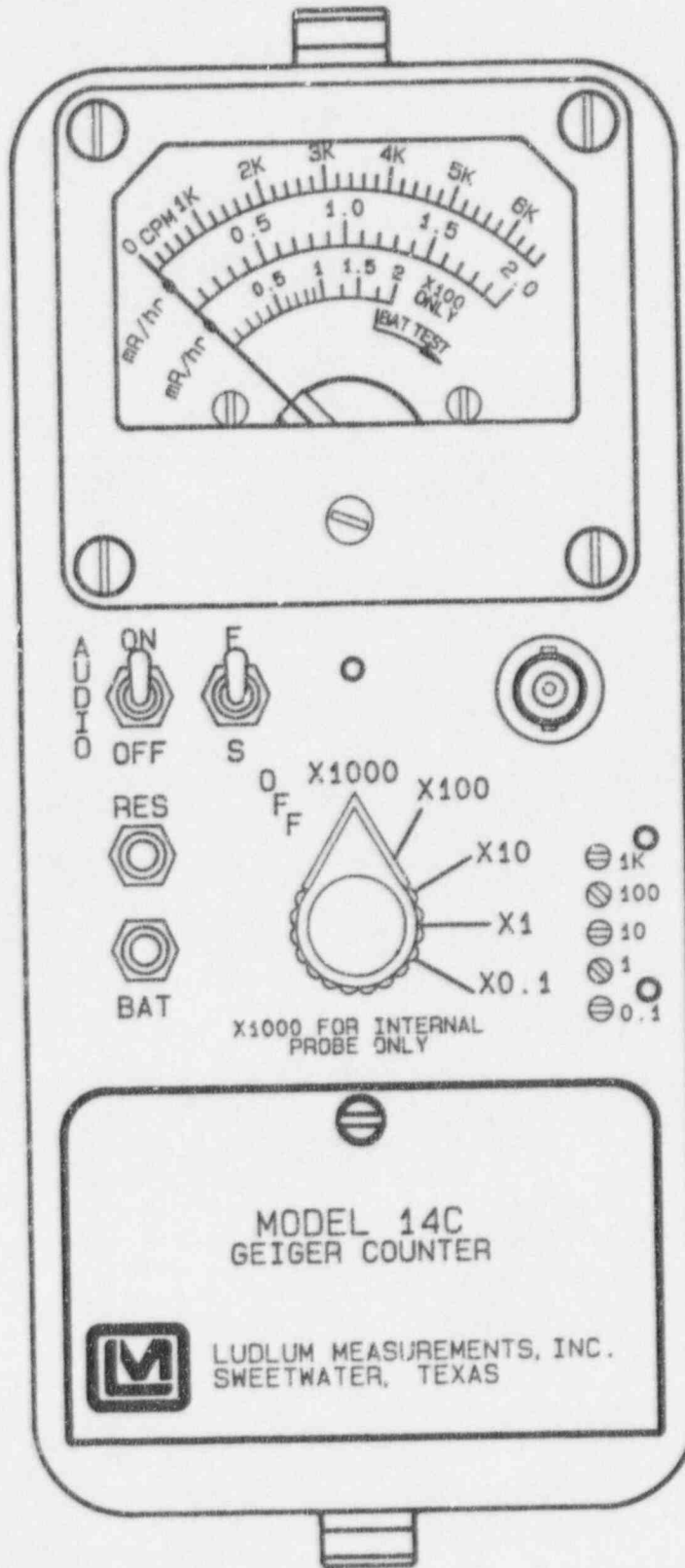
A handwritten signature in dark ink, appearing to read "Guillermo Obando", followed by a stylized flourish or initial.

Guillermo Obando, M. D.
Radiologist
Radiation Safety Officer

GO/sl
Enclosure

cc: Regional Administrator, Region III
801 Warrenville Road
Lisle, Illinois 60532-4351

GO/sl



CHK NO.			CHK DATE	APP DATE
3082-13-83				
TOL: SHOP STD	<input type="checkbox"/>	SCALE: FULL	<input type="checkbox"/>	
TITLE MODEL 14C GEIGER COUNTER				
LUDLUM MEASUREMENTS, INC.	363	518		



Designer and Manufacturer
of
Scientific and Industrial
Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.

PO BOX 810 PH. 915-235-5494
501 OAK STREET FAX NO. 915-235-46
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER BEDFORD REGIONAL MEDICAL CENTER ORDER NO. 962139

Mfg. Ludlum Measurements, Inc. Model 14C Serial No. 129632

Mfg. Ludlum Measurements, Inc. Model 44-7 Serial No. PR133492

Cal. Date 06/11/96 Cal Due Date 06/11/97 Cal. Interval 1 Year Meterface 202-33

Check mark ☒ applies to applicable instr. and/or detector IAW mfg. spec. T. 75 °F RH 54 % Alt 699.8 mm

☒ New Instrument Instrument Received ☐ Within Toler. $\pm 10\%$ ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair

☒ Mechanical ck. ☒ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity

☒ F/S Resp. ck. ☒ Reset ck. ☐ Window Operation ☒ Geotropism

☒ Audio ck. ☐ Alarm Setting ck. ☒ Batt. ck. (Min. Volt) 2.2 VDC

☐ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☒ Calibrated in accordance with LMI SOP 14.9 rev 12/19/89.

Instrument Volt Set 900 V Input Sens. 33 mV Det. Oper. 900 V at 33 mV Threshold mV

Dial Ratio =

☐ HV Readout (2 points) Ref./Inst. / V Ref./Inst. /

COMMENTS:

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
X1000	1500mR/hr		1.5
X1000	500mR/hr		0.51
X100	150mR/hr		1.5
X100	50mR/hr		0.45
X 10	15mR/hr		1.5
X 10	5mR/hr		0.55
X 1	1.5mR/hr = 3400 cpm		1.5
X 1	1.0mR/hr		1.0
X0.1	340 cpm		1.5
X0.1	113 cpm		0.5

*Uncertainty within $\pm 10\%$ C.F. within $\pm 20\%$

X0.1 Range(s) Calibrated Electronically

REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout			Log Scale		

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of MIL-STD-45662A and ANSI N329-1978. State of Texas Calibration License No. 10-173

Reference Instruments and/or Sources:

Cs-137 Gamma S/N ☒ 1162 ☐ G112 ☐ M565 ☐ 5105 ☒ T1008 ☐ T879 ☐ Neutron Am-241 Be S/N T 104

☐ Alpha S/N ☐ Beta S/N ☐ Other

☒ m 500 S/N 63888 ☐ Oscilloscope S/N ☐ Multimeter S/N

Calibrated By: Stephen Henington Date 6-11-96

Reviewed By: Phonda Harris Date 6-11-96