

BAKER TESTING SERVICES, INC.

NONDESTRUCTIVE EXAMINATION
METALLURGY AND FAILURE ANALYSIS

FRED E. STRAUT, PRESIDENT
KENNETH F. BAKER, VICE PRESIDENT
DR. DAVID L. HOLT, TREASURER

21 FOTTLER ROAD
HINGHAM, MASS. 02043
(617) 749-0770

September 21, 1982

Mr. Thomas T. Martin, Director
Division of Engineering and Technical Programs
Nuclear Regulatory Commission
Region 1
631 Park Avenue
King of Prussia, Pennsylvania 19406

Subject: Response to Inspection No. 82-01 and Appendix A
Notice of Violation Docket No. 30-16008

Gentlemen:

Item A

Item A has been reviewed and discussed with all radiographers and radiographer's assistants. It is now understood that whenever any radiographic work is in progress, it is mandatory for a radiographer to be present at the site.

Item B

Item B has been reviewed and discussed with all radiographers and radiographer's assistants. A retraining session was instituted on the correct way to survey a sealed source to insure adequate storage. Particular emphasis was placed upon the radiation survey to include the entire circumference of the device and the entire length of the guide tube.

Item C

Copies of the calibration records for survey meter No. 3223 for the period of time October 30, 1981 to March 10, 1982 have been located. They were misfiled. (I am enclosing copies as evidence.) To insure that this will not happen again we have changed our filing system. A separate folder for calibration records of survey meters and dosimeters has been put into place.

8210220433 821018
NMS LIC30
20-19067-01 PDR

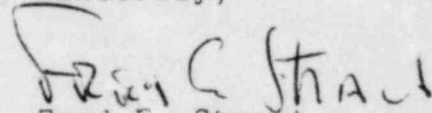
Item D

To comply with this violation a more reliable notification system has been instituted. The company secretary will be notified of delivery of new sealed sources in order to determine the six month interval for compliance. In addition, a Technical Operations Sealed Source Leak Test Kit has been ordered to provide an emergency back up should it be necessary. (A copy of the Purchase Order is offered as evidence.)

Item E

We feel we are in violation of this item because of misinterpretation. Our assumption on the three month audits was to audit any radiographic or at all radiographers and radiographer's assistants involve field operations within the three month interval. A notice has been posted in the permanent facility (Baker Testing Services Inc., 25 Fottler Road, Hingham, Massachusetts) appraising all pertinent personnel of this change. (Enclosed)

Sincerely,


Fred E. Straut

FES/ndb



NUCLEAR INSTRUMENT CO.

Reg. No. 4892

Calibration Certificate

Customer: Baker Trilling Probe Type: _____
 Instrument Model: 492 Serial No.: _____
 Serial No.: 3223 Calibration Date: 2-2-82

Calibration source(s)	Radium 226 <input type="checkbox"/> A	Radium 226 <input type="checkbox"/> B	Radium 226 <input type="checkbox"/> C	Cesium 137 <input type="checkbox"/> D	Cesium 137 <input type="checkbox"/> E
Quantity	25.02 mg.	4.98 mg.	1.03 mg.	130 curies	100 mCi.
Mfgs. No.	11880	1582	1-728	Model 69	28-5
NBS Traceable No.	TPX 33822	11005	11005	C-396	30214
Date	8-20-70	11-5-75	9-22-77	9-14-68	10-8-79

Calculated Exposure Rate	Meter Reading	Range Maximum	Calibration Source(s)
<u>800</u>	<u>800</u>	<u>1000</u> MR/hr	<input type="checkbox"/> E
<u>400</u>	<u>440</u>	— R/hr	
<u>200</u>	<u>240</u>		
<u>80</u>	<u>78</u>	<u>100</u> MR/hr	<input type="checkbox"/> E
<u>40</u>	<u>42</u>	— R/hr	
<u>20</u>	<u>20</u>		
<u>8</u>	<u>8</u>	<u>10</u> MR/hr	<input type="checkbox"/> E
<u>4</u>	<u>4.4</u>	— R/hr	
<u>2</u>	<u>2.4</u>		
_____	_____	_____ MR/hr	<input type="checkbox"/>
_____	_____	_____ R/hr	
_____	_____	_____ MR/hr	<input type="checkbox"/>
_____	_____	_____ R/hr	

Integrate
Calculated Dose

Beta Shield Open Closed
 Detector center axis parallel perpendicular to radiation field
 Electronic Alignment Temperature _____ °C Barometric Pressure _____ mm(Hg) Elevation _____
 Instrument check source: Scale: _____ Reading: _____

Remarks: _____

This instrument has been calibrated using procedures recommended by the N.R.C
 U.S. Nuclear Regulatory Commission U.S.N.R.C. License No. 20-16972-01

Calibrated by Carl Gunn

65 Grove Street — P.O.Box 178 — Rockland, MA. 02370 — Tel. Area Code 617 - 878-6878

NUCLEAR / radiation detection products / instrument services / accessories / supplies

Reg. No. 4772



Calibration Certificate

Customer Baker Testing Probe Type _____
 Instrument Model 492 Serial No. _____
 Serial No. 3223 Calibration Date 10-29-81

NUCLEAR INSTRUMENT CO.

Calibration source(s)	Radium 226 ^A	Radium 226 ^B	Radium 226 ^C	Cesium 137 ^D	Cesium 137 ^E
Quantity	25.02 mg.	4.98 mg.	1.03 mg.	130 curies	100 mCi.
Mfgs. No.	11680	1582	1-738	Model 69	28-5
Traceable No.	TPX 33822	11005	11005	C-396	30214
Date	3-20-70	11-5-75	9-22-77	9-14-68	10-8-79

Calculated Exposure Rate	Meter Reading	Range Maximum	Calibration Source(s)
<u>300</u>	<u>800-820</u>		<input type="checkbox"/>
<u>400</u>	<u>420-440</u>	<u>1000</u> MR/hr	
<u>200</u>	<u>220-240</u>	_____ R/hr	
<u>80</u>	<u>78-80</u>		<input type="checkbox"/>
<u>40</u>	<u>42</u>	<u>100</u> MR/hr	
<u>20</u>	<u>22</u>	_____ R/hr	
<u>8</u>	<u>8-9.6</u>		<input type="checkbox"/>
<u>4</u>	<u>4.2-5</u>	<u>10</u> MR/hr	
<u>2</u>	<u>2-2.6</u>	_____ R/hr	
_____	_____	_____ MR/hr	<input type="checkbox"/>
_____	_____	_____ R/hr	
_____	_____	_____ MR/hr	<input type="checkbox"/>
_____	_____	_____ R/hr	

Integrate
Calculated Dose

Beta Shield Open Closed
 Detector center axis parallel perpendicular to radiation field
 Electronic Alignment Temperature _____ °C Barometric Pressure _____ mm(Hg) Elevation _____
 Instrument check source: Scale: _____ Reading: _____

Remarks: _____

This instrument has been calibrated using procedures recommended by the N.R.C
 U.S. Nuclear Regulatory Commission U.S.N.R.C. License No. 20-16972-01

Calibrated by Carl J. Bonari

65 Grove Street - P.O. Box 178 - Rockland, MA. 02370 - Tel. Area Code 617 - 878-6878

NUCLEAR / radiation detection products / instrument services / accessories / supplies

ITEM D

BAKER TESTING SERVICES INC.
25 FOTTLER ROAD
HINGHAM, MASSACHUSETTS 02043
617-749-0770

Purchase No. 525
Order

This order number must appear on all packages, correspondence, invoices and shipping papers.

TO Technical Operations
South Avenue
Burlington, Massachusetts

SHIP TO: US AT ABOVE ADDRESS IF NOT FILLED IN

DATE 9-21-82	DATE REQUIRED ASAP	SHIP VIA	F.O.B.	PPD	COLL.	COPIES OF INVOICE WITH BILL OF LADING
SUBJECT TO SALES AND USE TAX		EXEMP.-REG. NO.	REQUISITION NO.	CHARGE TO		

ITEM	QUANTITY		DESCRIPTION	PRICE	PER	AMOUNT
	ORDERED	RECEIVED				
1			Sealed Source Leak Test Kit			

Instructions and Conditions
 1. Please notify us immediately if you are unable to ship complete order by date specified.
 2. All materials subject to inspection on arrival, without prior payment to obtain cash discount.

Fred Stuart
 AUTHORIZED SIGNATURE

ORIGINAL

ITEM E

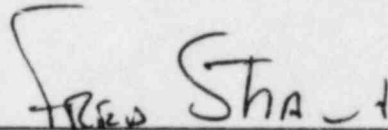
NOTICE

TO ALL RADIOGRAPHERS AND RADIOGRAPHER'S ASSISTANTS

SUBJECT: 3 Month Field Audit of Radiography Operations

A new policy has been instituted whereby either the Radiation Safety Officer or Assistant Radiation Safety Officer will now audit ALL radiographers and radiographer's assistants within the mandated 3 month audit time period.

This is to comply with a recent violation as a result of a Nuclear Regulatory Commission Audit of this facility.



Assistant Radiation Safety Officer