



## International Isotopes Inc.

January 03, 2007

Mr. Nima Ashkeboussi  
Mail Stop 8F3  
11555 Rockville Pike  
Rockville, MD 20852

Subject: Response to Question Regarding Amendment Request for  
NR-1235-S-102-S

Dear Mr. Ashkeboussi,

I received your email from 1/3/2007 regarding the calibration due dates listed for exposure rate instruments on the last page of enclosure 1 of my application to amend NR-1235-S-102-S. Your comment is provided below for reference:

On the last page of Enclosure 1 to your letter, you provided the calibration dates for the instruments used to measure the radiation profile for Model BM06S-57. The date that the exposure rates were recorded are past the calibration due date of the instruments. Please provide justification on how the rates recorded are accurate.

I reviewed our calibration records and discovered that the dates on the enclosure were recorded in error. One date was recorded as 6/1/06 for Bicon MicroRem Serial Number B346V. This date should have been 6/1/07. The date for the Ludlum Model 5, Serial Number 194973 should have been recorded as 7/12/07. Please find the attached copies of the calibration record sheets for these instruments to supporting these corrections.

Should you have any questions, please contact me by phone at (208) 524-5300 or by email at [jjmiller@intisoid.com](mailto:jjmiller@intisoid.com).

Sincerely,

John J. Miller, CHP  
Radiation Safety Officer  
Enclosures as stated



3998 COMMERCE CR. IDAHO FALLS, IDAHO 83401  
 (208) 523-5557 FAX (208) 524-8470  
 www.qaltek.com

**DOSE RATE INSTRUMENT**

**CUSTOMER INFORMATION**

<b>Customer:</b> International Isotopes of Idaho	<b>Address:</b> 4137 Commerce Circle	<b>Idaho Falls ID:</b> 83401
<b>Contact:</b> John Miller	<b>ITS #:</b> S0575-06	<b>PO #:</b>
<b>Comments:</b>	<b>Date:</b> 05/31/06	<b>Phone #:</b> 208-524-5300
		<b>FAX #:</b> 208-523-6885

**INSTRUMENT IDENTIFICATION**

<b>MFG'R:</b> Bicron	<b>MOD #:</b> Micro Rem	<b>S/N:</b> B346V	<b>CAL DATE:</b> 06/01/06	<b>Next Cal Due:</b> 06/01/07
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**ENVIRONMENTAL CONDITIONS**

<b>Temp.:</b> 21 C	<b>Press.:</b> 25.34 in Hg	<b>% Humidity:</b> 36	<b>Laboratory Elevation:</b> 4,750 Feet
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**MEASUREMENT & TEST EQUIPMENT**

Shepherd Mod. 81-10 sn 9004	Cal Due: 3/10/07	Eberline MP2 Pulser sn 905	Cal Due: 6/10/06
	Cal Due:		Cal Due:

**CALIBRATION & TEST MEASUREMENTS**

Source ID #	Isotope	Scale/Range	Expected Reading	As-Found Reading	As-Left Reading	Tolerance +/- %	Pass/Fail	Background Reading
pulser		X0.1	4 µR	3.9 µR	3.9 µR	10%	P	Comments: 20 µR
pulser		X0.1	16 µR	16 µR	16 µR	10%	P	
pulser		X1	40 µR	40 µR	40 µR	10%	P	
B7-471	Cs 137	X1	160 µR	160 µR	160 µR	10%	P	
B7-471	Cs 137	X10	400 µR	400 µR	400 µR	10%	P	
01-500	Cs 137	X10	1600 µR	1550 µR	1550 µR	10%	P	
01-500	Cs 137	X100	4 mR	3.9 mR	3.9 mR	10%	P	
01-500	Cs 137	X100	16 mR	15.8 mR	15.8 mR	10%	P	
01-500	Cs 137	X1000	40 mR	40 mR	40 mR	10%	P	
01-500	Cs 137	X1000	160 mR	160 mR	160 mR	10%	P	

**CALIBRATION OPERATIONAL CHECKS**

<b>Reproducibility:</b> <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<b>High Voltage:</b> <input checked="" type="checkbox"/> OK	<b>Geotropism:</b> <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
<b>Zero Check:</b> <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail		

**CALIBRATION RESULTS**  PASS  FAIL

<b>CALIBRATION TECHNICIAN</b> <i>Tracy Brunson</i>	Tracy Brunson	<b>DATE</b> 06/01/06
<b>OPERATIONS MANAGER</b> <i>Gary Stoddard</i>	Gary Stoddard	<b>DATE</b> 06/01/06

QAL-TEK ASSOCIATES, LLC, certify that the above instrument has been calibrated by radioactive standards traceable to the National Institute of Standards and Technology (NIST), or traceable to calibration facilities for 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. Accuracy of the principal radiation sources used in the calibration is greater or equal to the required accuracy of the equipment being calibrated. The QAL-TEK calibration system conforms to applicable ANSI standards. All calibrations are performed in accordance with the customers Purchase Order requirements, the QAL-TEK Quality Assurance Management Program (QP-PRO-001) and the Calibration Procedure (CP-PRO-244), which are available at the customers request.



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## CALIBRATION CERTIFICATE - DOSE RATE

### CUSTOMER INFORMATION

<b>Customer:</b> International Isotopes of Idaho	<b>Address:</b> 4137 Commerce Circle	<b>Idaho Falls ID</b> 83401
<b>Contact:</b> John Miller	<b>ITS #:</b> S0716-06	<b>PO #:</b>
<b>Comments:</b>	<b>Date:</b> 07/11/06	<b>Phone #:</b> 208-524-5300
		<b>FAX #:</b> 208-523-6885

### INSTRUMENT IDENTIFICATION

<b>MFG'R:</b> Ludlum	<b>MOD #:</b> 5	<b>S/N:</b> 194973	<b>CAL DATE:</b> 07/12/06	<b>Next Cal Due:</b> 07/12/07
<b>PROBE IDENTIFICATION</b>				
<b>MFG'R:</b> Ludlum	<b>MOD #:</b> 5	<b>S/N:</b> internal	<b>CAL DATE:</b> 07/12/06	<b>Next Cal Due:</b> 07/12/07

### ENVIRONMENTAL CONDITIONS

<b>Temp.:</b> 22 C	<b>Press.:</b> 25.19 in Hg	<b>% Humidity:</b> 36	<b>Laboratory Elevation:</b> 4,750 Feet
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### MEASUREMENT & TEST EQUIPMENT

Shepherd Mod. 81-10 sn 9004	<b>Cal Due:</b> 3/10/07	Ludlum 500-4B Pulser sn 163856	<b>Cal Due:</b> 5/25/07
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### CALIBRATION & TEST MEASUREMENTS

Source ID #	Isotope	Scale/Range	Expected Reading	As-Found Reading	As-Left Reading	Tolerance +/- %	Pass/Fail	Background Reading	
								0.03	mR
pulser		X0.1	0.04 mR	0.040 mR	0.040 mR	10%	P	Comments:	
pulser		X0.1	0.16 mR	0.159 mR	0.159 mR	10%	P		
B7-471	Cs 137	X1	0.4 mR	0.41 mR	0.41 mR	10%	P		
01-500	Cs 137	X1	1.6 mR	1.62 mR	1.62 mR	10%	P		
01-500	Cs 137	X10	4 mR	4.2 mR	4.2 mR	10%	P		
01-500	Cs 137	X10	16 mR	16.4 mR	16.4 mR	10%	P		
01-500	Cs 137	X100	40 mR	41 mR	41 mR	10%	P		
01-500	Cs 137	X100	160 mR	161 mR	161 mR	10%	P		
01-110	Cs 137	X1000	400 mR	400 mR	400 mR	10%	P		
01-110	Cs 137	X1000	1600 mR	1550 mR	1550 mR	10%	P		

### CALIBRATION OPERATIONAL CHECKS

<b>Reproducibility:</b> <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	<b>High Voltage:</b> <input checked="" type="checkbox"/> OK	<b>Geotropism:</b> <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
<b>Zero Check:</b> <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail		

### CALIBRATION RESULTS PASS FAIL

<b>CALIBRATION TECHNICIAN</b> <i>Cody Brammer</i> Cody Brammer	<b>DATE</b> 07/12/06
<b>OPERATIONS MANAGER</b> <i>Gary Stoddard</i> Gary Stoddard	<b>DATE</b> 07/12/06

QAL-TEK ASSOCIATES, LLC, certify that the above instrument has been calibrated by radioactive standards traceable to the National Institute of Standards and Technology (NIST), or traceable to calibration facilities for 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. Accuracy of the principal radiation source used in the calibration is greater or equal to the required accuracy of the equipment being calibrated. The QAL-TEK calibration system conforms to ANSI N323-1997. All calibrations are performed in accordance with the customers Purchase Order requirements, the QAL-TEK Quality Assurance Management Program (QP-PRO-001) and the Calibration Procedure (CP-PRO-645), which are available at the customers request.