



Calibration Location:  
3998 Commerce Circle  
Idaho Falls, ID 83401  
Ph: 208 523-5557

# Certificate of Calibration



Customer: URS Corporation  
Address: 8181 E. Tufts Ave  
Phone: 303-740-2721

Att.: Sally Miller  
City: Denver State: CO Zip: 80237

Serial Number: **248264**  
Calibration Date: 15-Jul-2011

Mfg: Ludlum Model: 2401-EW

Ref. #: W231-000938  
Calibration/Ver. Due Date: 15-Jul-2012

## HP Dose Rate

### Basic Information

Ambient Temperature	Pressure (hg)	Humidity (%)	Lab Elevation (ft)	Background Reading (uR)
22	25.11	35	4750	40

### Test Measurements

Source ID	Isotope	Scale/Range	Expected Reading	Reading Units	As Found Reading	As Left Reading	Tolerance +/- (%)	Pass/Fail
Shepherd	Cs 137	X1	0.4	mR	.41	.41	10	Pass
Shepherd	Cs 137	X1	1.6	mR	1.61	1.61	10	Pass
Shepherd	Cs 137	X10	4	mR	4	4	10	Pass
Shepherd	Cs 137	X10	16	mR	16	16	10	Pass
Shepherd	Cs 137	X100	40	mR	40	40	10	Pass
Shepherd	Cs 137	X100	160	mR	150	150	10	Pass

### Comments

### Calibration Operational Checks

Reproducibility	Pass
High Voltage	Ok
Geotropism	Pass
Zero Check	N/A
Calibration Constant	N/A
Dead Time	N/A
CALIBRATION RESULTS	PASS

### Calibration Instruments Information:

J. L. Shepherd : 81-10 Irradiator : 9004 -- Cal. Date: 05-Nov-2010

Cal. Procedure: CP-PRO-244/171

Date of Service: 15-Jul-2011

Service Technician: Cody Brammer

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Results relate only to item calibrated. Uncertainty of measurement was estimated at approximately 95% confidence level, (k=2).  
All reference standards used are traceable to NIST. Qal-Tek Associates maintains a quality system (Quality Assurance Management Plan) that meets or exceeds the requirements set forth in the following documents: ANSI / NGSL Z540-1 1994 and ISO / IEC 17025.