

2015-5999-1

243 Root Street Suite 100 Olean, NY 14760

		Customer				Ins	trument				
Customer Nam	ne: MJW Corp	oration			Manufacturer:	Bicron					
	15 Hazelwood Di Suite 112	ve			Model: Micro Rem SN: B693G						
	Amherst, NY 142	28			Detector Manufactur	er: Bicron					
Customer PO#	1	Wo	rk Order: 201	5-5999	Det. Model: Intern	al Scintillator	SN: n/a				
Calibration Me	thod: Electronic	*) and Source			Procedure: MCP-	01					
Instrument Re	ceived:	/ithin Tolerance	Out of	Tolerance	Repairs Required	Other (See	Comments)				
✓ Geotropism	V	leter Zero	✓ Mech.	Ck v	HV Readout	▼ Battery Ch	eck	Reset			
Audio		Vindow Status	FS Re	sponse	Linearity	Alarm Set					
Temperature:	70 F	Humidity:	50%	Pi	ressure: 28.7 in Hg	3	Altitude: 14	50 ft			
	The state of the s			Instrumen	t Calibration			De Jean Co			
	Calibrati	on In	strument Respo	onse		Calibration	1	nstrument Res	oonse		
Multiplier/Range	Point	As Found	As Left	Tolerance	Multiplier/Range	Point	As Found	As Left	Tolerano		
X 0.1*	4 u	R/hr 3.9 uR/hr	3.9 uR/hr	3.4-4.6	X 0.1*	16 uR/hr	16 uR/hr	16 uR/hr	14.4-17		
X 1*	40 u	R/hr 40 uR/hr	40 uR/hr	34-46	X 1	160 uR/hr	160 uR/hr	160 uR/hr	144-17		
X 10	400 u	R/hr 400 uR/hr	400 uR/hr	340-460	X 10	1600 uR/hr	1600 uR/hr	1600 uR/hr	1440-176		
X 100	4000 u	₹/hr 4000 uR/hr	4000 uR/hr	3400-4600	X 100	16000 uR/hr	16000 uR/hr	16000 uR/hr	14400-1760		
X 1K	40000 u	R/hr 40000 uR/hr	40000 uR/hr	34000-46000	X 1K	160000 uR/hr	162000 uR/hr	162000 uR/hr	144000-17600		
X 0.1*	400 cp	m = 3.9 uR/hr	3.9 uR/hr	For Reference	X 0.1*	1600 cpm =	16 uR/hr	16 uR/hr	For Reference		
X 1*	4 kct	m = 40 uR/hr	40 uR/hr	For Reference	X 1*	16 kcpm =	160 uR/hr	160 uR/hr	For Reference		
				Electronic In	struments			THE TUE			
Pulser: 500-2 si	n# 220106										
			No. of the last	Source	S						
lsotope	Serial#	Type		A	etivity R	esponse E	fficiency	CF Distar	ice		
Cs137	7773CM	Cell 1 Gam	ma Irradiator		1.581 Ci						
				Instrument St	atus	THE REAL PROPERTY.	P. 100 11 15 11	N 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			

Statement of Certification

Calibration Technician: Adda a fra	QA Technician:	Date: 5-6-15
Calibration Date: 05/05/2015	Calibration Due: 05/05/2016	



2015-6089-2

243 Root Street Suite 100 Olean, NY 14760

		Cus	tomer				Ins	trument					
Customer	r Name: M.	JW Technical	Services		1	Manufacturer:	Bicron						
Address:	243 Roo				1	Model: Micro Rem SN: 1487							
	Suite 100 Olean, N	7-			1	Detector Manufactur	er: Bicron						
Customer	r PO#		Wor	rk Order: 2015	5-6089	Det. Model: Internal Scintillator SN: n/a							
Calibratio	n Method: E	lectronic(*) ar	nd Source		ı	Procedure: MCP-	01						
Instrume	nt Received:	Within	Tolerance	✓ Out of 7	Tolerance	Repairs Required	Other (See	Comments)					
✓ Geotro	pism	✓ Meter	Zero	✓ Mech. (Ck 🗸	HV Readout	✓ Battery Ch	eck	✓ Reset				
Audio		Windo	ow Status	FS Res	sponse	Linearity	Alarm Set						
Temperat	ture: 71.2 F		Humidity:	57%	Pr	essure: 28.5 in Hg)	Altitude: 145	50 ft				
					Instrument	Calibration			The Steel				
		Calibration	Ins	strument Respo	nse		Calibration	T In	nstrument Res	oonse			
Multiplier/F	Range	Point	As Found	As Left	Tolerance	Multiplier/Range	Point	As Found	As Left	Toleranc			
X 0.1*		4 uR/hr	3.8 uR/hr	3.8 uR/hr	3,4-4.6	X 0.1*	16 uR/hr	16.2 uR/hr	16.2 uR/hr	14.4-17			
X 1*		40 uR/hr	40 uR/hr	40 uR/hr	34-46	X 1	160 uR/hr	130 uR/hr	160 uR/hr	144-17			
X 10		400 uR/hr	350 uR/hr	400 uR/hr	340-460	X 10	1600 uR/hr	1420 uR/hr	1600 uR/hr	1440-176			
X 100		4000 uR/hr	3500 uR/hr	4000 uR/hr	3400-4600	X 100	16000 uR/hr	14500 uR/hr	16000 uR/hr	14400-1760			
X 1K		40000 uR/hr	34000 uR/hr	41000 uR/hr	34000-46000	X 1K	160000 uR/hr	142000 uR/hr	160000 uR/hr	144000-17600			
X 0.1*		400 cpm =	400 uR/hr	400 uR/hr	For Reference	X 0.1*	1600 cpm =	1600 uR/hr	1600 uR/hr	For Reference			
X 1*		4 kcpm =	4000 uR/hr	4000 uR/hr	For Reference	X 1*	16 kcpm =	160000 uR/hr	160000 uR/hr	For Reference			
				THE PART OF	Electronic Ins	struments							
Pulser: 50	0-2 sn# 2200	99											
	Maria Par				Sources				Taranja (a				
Isotope	Serial#		Type		A	ctivity R	esponse F	Efficiency	CF Distar	ace			
Cs137	7773CM	1	Cell 1 Gamr	ma Irradiator		1.577 Ci							

Statement of Certification

Calibration Technician: (GH)	QA Technician: Date: 6/19	1/5	
Calibration Date: 06/18/2015	Calibration Due: 06/18/2016	1	



2015-6178-4

243 Root Street Suite 100 Olean, NY 14760

	112-3	Cus	stomer				Inst	rument				
Customer N	Name: M	JW Corporati	on			Manufacturer: E	Bicron					
Address:	15 Haze Suite 11	lwood Drive				Model: Micro Rem SN: A224U						
		, NY 14228				Detector Manufacturer: Bicron						
Customer F	PO#		Wor	rk Order: 201	5-6178	Det. Model: Interna	al Scintillator	SN: n/a				
Calibration	Method: E	lectronic(*) ar	nd Source			Procedure: MCP-0)1					
Instrument	Received:	Within	Tolerance	Out of	Tolerance	Repairs Required	Other (See	Comments)				
✓ Geotropi	ism	✓ Meter	Zero	✓ Mech.	Ck 🗸	HV Readout	▼ Battery Che	ck	Reset			
Audio		Winde	ow Status	FS Res	sponse	Linearity	Alarm Set					
Temperatur	re: 72 F		Humidity:	50%	P	ressure: 28.4 in Hg		Altitude: 145	50 ft			
A TANK					Instrumen	t Calibration		and the second	STREET, STREET			
		Calibration	Ins	trument Respo	onse	T	Calibration	- I	nstrument Resp	oonse		
Multiplier/Ra	nge	Point	As Found	As Left	Tolerance	Multiplier/Range	Point	As Found	As Left	Tolerance		
X 0.1*		4 uR/hr	3.9 uR/hr	3.9 uR/hr	3.4-4.6	X 0.1*	16 uR/hr	16.1 uR/hr	16,1 uR/hr	14.4-17		
x 1*		40 uR/hr	40 uR/hr	40 uR/hr	34-46	X 1	160 uR/hr	160 uR/hr	160 uR/hr	144-17		
X 10		400 uR/hr	400 uR/hr	400 uR/hr	340-460	X 10	1600 uR/hr	1600 uR/hr	1600 uR/hr	1440-176		
X 100		4000 uR/hr	4000 uR/hr	4000 uR/hr	3400-4600	X 100	16000 uR/hr	16200 uR/hr	16200 uR/hr	14400-17600		
X 1K		40000 uR/hr	40000 uR/hr	40000 uR/hr	34000-46000	X 1K	160000 uR/hr	160000 uR/hr	160000 uR/hr	144000-176000		
X 0.1*		400 cpm =	3.9 uR/hr	3.9 uR/hr	For Reference	X 0.1*	1600 cpm =	16,1 uR/hr	16.1 uR/hr	For Reference		
X 1*		4 kcpm =	40 uR/hr	40 uR/hr	For Reference	X 1*	16 kcpm =	160 uR/hr	160 uR/hr	For Reference		
		YES STATE			Electronic In	struments						
Pulser: 500-	2 sn# 2201	06										
					Source	S						
Isotope	Serial#		Type		A	ctivity Re	sponse Ef	ficiency	CF Distar	ice		
Cs137	7773CM	ſ	Cell 1 Gamr	na Irradiator		1.572 Ci						
				X = 1-2 = (9)	Instrument St		NAME OF TAXABLE PARTY.	OF BUILDING				

Statement of Certification

Calibration Technic (AL)	ian:	QA Technician:	Samo	Date: P/19/15
Calibration Date:	08/04/2015	Calibration Due:	08/04/2016	



2015-6241-1

243 Root Street Suite 100 Olean, NY 14760

Calibration Technician:

09/01/2015

Calibration Date:

(AL)

0 1 11 11	Cus	stomer				Inst	rument				
Customer Name: N	IJW Corporati	on		N	Manufacturer:	Ludlum Measuren	nents				
Address: 15 Haze	elwood Drive			1	Model: 2241-2 SN: 206098						
Amhers	t, NY 14228			, i	Detector Manufacture	er: Ludlum Mea	surements	_			
Customer PO#		Work	Order: 2015-	-6241	Det. Model: 44-10		SN: PR1	12642	1-Red		
Calibration Method: E	Electronic(*)			F	Procedure: SOP-0	06					
Instrument Received:	Within	n Tolerance	Out of T	olerance	Repairs Required						
Geotropism	Meter	r Zero	✓ Mech. C	k 🗌	HV Readout	▼ Battery Che	ck	Reset			
✓ Audio	Wind	ow Status	¥ FS Resp	oonse 🗸	Linearity	✓ Alarm Set					
Temperature: 71 F		Humidity:	52%	Pro	essure: 28.5 in Hg		Altitude: 14	50 ft			
				Instrument	Calibration						
	Calibration	Inst	rument Respon	nse		Calibration		Instrument Respo	1012/22/4		
Multiplier/Range	Point	As Found	As Left	Tolerance	Multiplier/Range	Point	As Found	As Left	Tolerance		
Ratemeter Mode*	40 cpm	40 cpm	40 cpm	36-44	Ratemeter Mode*	400 cpm	399 cpm	399 cpm	360-440		
Ratemeter Mode*	4 kcpm	3.99 kcpm	3.99 kcpm	3.6-4.4	Ratemeter Mode*	40 kcpm	39.9 kcpm	39.9 kcpm	36-44		
			360-440	Scaler Mode*	40 cpm	40 cpm	40 cpm	36-44			
Scaler Mode* 400 cpm 400 cpm 400 cpm		360-440	Scaler Mode*	4 kcpm	3.993 kcpm	3.993 kcpm	3.6-4.4				
caler Mode* 40 kcpm 39.929 kcpm 39.929 kcpm					Scaler Mode*	400 kcpm	399.944 kcpm	399.944 kcpm	360-440		
sotope Serial#	4,40-	Туре		Sources		esponse El	ficiency	CF Distanc	e		
Am241 UB992		Y		200	#45 10 K .	159080	6.8 %	14.71 0 inch			
Cs137 UB994		Y		238101	13.672 dpm	220200	9.2 %	10.87 0 inch			
10 11	A CANA			nstrument Sta	itus	ALT THE	VI. SUN				
oisc/Sens: 10 mV				Alarm Statu			-	VARIABLE SALES			
ate Alarm: 200 k	cpm	Rate Al	ert: 100 kg	A STATE OF THE STA	Scal Alarm:	915 kcts					
			in s	Detector Stat	us				AN APPE		
C: 100e-2 D	T: 0 usec	Oper.	V: 850 V								
c. 100e 2 D											
				Comments		a house from			12 TO 10 TO		
etector settings		are identi	cal for swi						100 mg		

QA Technician:

Calibration Due:

09/01/2016

Page: 1/2

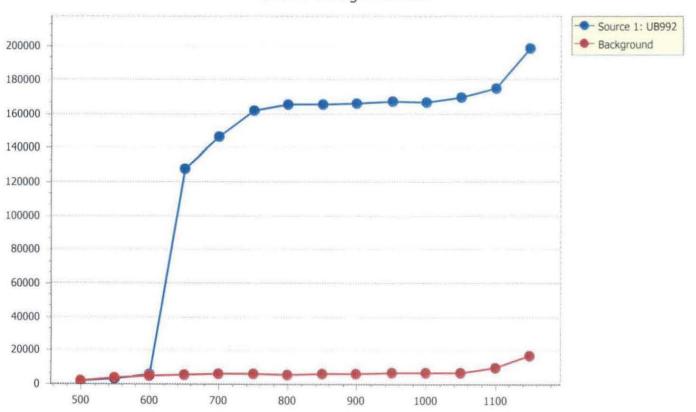


2015-6241-1

243 Root Street Suite 100 Olean, NY 14760

	Customer		Instrument						
Customer Name: MJ	W Corporation		Manufacturer: L	udlum Measurements					
Address: 15 Hazelv Suite 112	vood Drive		Model: 2241-2	SN	206098				
	NY 14228		Detector Manufacture	r: Ludium Measureme	nts				
Customer PO#	Work	Order: 2015-6241	Det. Model: 44-10	SN:	PR112642	1-Red			
Calibration Method: Ele	ectronic(*)		Procedure: SOP-0	6					
Instrument Received:	✓ Within Tolerance	Out of Tolerance	Repairs Required	Other (See Comme	nts)				
Geotropism	Meter Zero	✓ Mech. Ck	☐ HV Readout	✓ Battery Check	Reset				
✓ Audio	Window Status	✓ FS Response	Linearity	✓ Alarm Set					
Temperature: 71 F	Humidity:	52%	Pressure: 28.5 in Hg	Altitude	1450 ft				

Source Voltage Plateaus



Statement of Certification

Calibration Technician: (AL)	QA Technician: Date: 9-1-15
Calibration Date: 09/01/2015	Calibration Due: 09/01/2016



2015-6243-1

243 Root Street Suite 100 Olean, NY 14760

	Cu	stomer					Inst	rument		m!		
Customer Name:	MJW Corporat	ion			Manufacturer:	Ludlum M	leasuren	nents				
Address: 15 Ha	zelwood Drive				Model: 2241-2	2		SN: 262	2737			
9,510,61	rst, NY 14228				Detector Manufacturer: Ludlum Measurements							
Customer PO#		Work	Order: 2015	6-6243	Det. Model: 44-10 SN: PR111127 1-Red							
Calibration Method:	Electronic(*)				Procedure: S	OP-06						
Instrument Receive	d: Withi	n Tolerance	Out of 7	Tolerance	Repairs Require	ed Othe	er (See (Comments)				
Geotropism	Mete	r Zero	✓ Mech. (Ck _	HV Readout	✓ Bat	tery Che	ck	~	Reset		
Audio	Wind	ow Status	✓ FS Res	ponse	Linearity	✓ Alai	rm Set					
Temperature: 71.6	F	Humidity:	50%	P	ressure: 28.5 in	n Hg		Altitude: 1	450 ft			
		130000		Instrumen	t Calibration		1541					
	Calibration	Inst	rument Respo	nse		25.25(9)	bration		Instrum	ent Respon	se	
Multiplier/Range	Point	As Found	As Left	Tolerance	Multiplier/Rang	e P	oint	As Foun	d A	s Left	Tolerance	
Ratemeter Mode*	400 cpm	400 cpm	400 cpm	360-440	Ratemeter Mode*		4 kcpm	3.99 kcpr	3.9	9 kcpm	3.6-4.4	
Ratemeter Mode*	40 kcpm	39.9 kcpm	39.9 kcpm	36-44	Ratemeter Mode*	4	00 kcpm	399 kcpm 399 kcpm		9 kcpm	360-440	
Scaler Mode*	400 cpm	400 cpm	400 cpm	360-440	Scaler Mode*		4 kcpm	3.991 kcpn	3.99	1 kcpm	3.6-4.4	
Scaler Mode*	40 kcpm	39.942 kcpm	39.942 kcpm	36-44	Scaler Mode*	4	00 kcpm	399.824 kcpr	399.82	4 kcpm	360-440	
				Electronic In	struments							
Pulser: 500-2 sn# 22	0106											
				Source	S		12/10					
Isotope Seria		Type			etivity	Response	Ef	ficiency	CF	Distance		
Am241 UB99		Y			01.240 dpm	134517		5.7 %	17.54	0		
Cs137 UB99	94	Y		23808	63.342 dpm	214047		9.0 %	11.11	0 inch		
				Instrument St	atus							
Disc/Sens: 10 mV	4									112		
Rate Alarm: 300	kenm	Pate Al	ert: 200 k	Alarm Statu		m: 300 kct	c					
MCC HIGHN 500	жерш	nace al	erc. 200 k	Detector Sta	acta) Suste	III. 300 KCC						
CC: 100e-2	DT: 0 usec	Oper.	V: 1000 V		iu d							
Contract of the		EXCITED IN		Comments	3	21067-1	200	SI SIVA	- Table		And the second	
Response to Thor	ium wolding	rad abaak	course #11			1000 (12	A.A. Ivan	20.1	e 1			

Statement of Certification

Calibration Technic		QA Technician:	Date: 5-3-15
Calibration Date:	09/02/2015	Calibration Due: 09/02/2016	



2015-6243-2

243 Root Street Suite 100 Olean, NY 14760

	Cus	stomer				Inst	rument	1				
Customer Name:	MJW Corporati	ion			Manufacturer: L	udlum Measuren	nents					
	zelwood Drive				Model: 2241-2 SN: 262737							
Suite 1	112 st, NY 14228				Detector Manufacturer: Ludium Measurements							
Customer PO#		Work	Order: 2015	-6243	Det Model: 43-90		SN: PR27	77929		2-Yellow		
Calibration Method:	Electronic(*)				Procedure: SOP-0	6						
Instrument Received	d: Within	n Tolerance	Out of 7	Tolerance	Repairs Required Other (See Comments)							
Geotropism	Meter	r Zero	✓ Mech. 0	Ck [HV Readout	✓ Battery Che	ck	V Re	eset			
Audio	Wind	ow Status	✓ FS Res	ponse [Linearity	✓ Alarm Set						
Temperature: 71.6	F	Humidity:	50%	F	Pressure: 28.5 in Hg		Altitude: 14	50 ft				
				Instrumen	nt Calibration							
	Calibration	Instr	ument Respo	nse		Calibration	1	nstrumen	rument Response			
Multiplier/Range	Point	As Found	As Left	Tolerance	e Multiplier/Range	Point	As Found	As L	_eft	Tolerance		
Ratemeter Mode*	400 cpm	400 cpm	400 cpm	360-44	Ratemeter Mode*	4 kcpm	3.99 kcpm	m 3.99 kcpm		3.6-4.4		
Ratemeter Mode*	40 kcpm	39.9 kcpm	39.9 kcpm	36-4	Ratemeter Mode*	de* 400 kcpm		399 kcpm		360-440		
Scaler Mode*	400 cpm	400 cpm	400 cpm	360-44	Scaler Mode*	4 kcpm	3.991 kcpm	3 991 kg	cpm	om 3 6-4 4		
Scaler Mode*	40 kcpm	39.942 kcpm 3	9.942 kcpm	36-4	4 Scaler Mode*	400 kcpm	399.824 kcpm	399.824 kr	cpm	360-440		
		Live Chilli	-	Electronic la	nstruments			N. C.				
Pulser: 500-2 sn# 220	0106											
6.5		77	E E S A A B	Source				on.		-		
sotope Serial		Туре					ficiency		Distance			
Pu239 C7-63	0	a 4pi			NO TABLE CAMEN	21284	19.1 %	5.24 () inch			
Disc/Sens: 10 mV				Instrument S	tatus				_ 4=-			
To he				Alarm Stat	nic .			10-070				
ate Alarm: 300	kcpm	Rate Ale	rt: 200 k	THE PARTY OF THE PARTY OF	Scal Alarm: 3	100 kcts	614		1000			
	No. of the same of	Day Town		Detector Sta	atus			1000		No.		
C: 100e-2	DT: 0 usec	Oper. V	: 700 V	Num: 2								
C: 100e-2				Comment	s		The state of the s					

Statement of Certification

Calibration Technician: (AL)	QA Technician:	Date: 523-15
Calibration Date: 09/02/2015	Calibration Due: 09/02/2016	



Certificate of Calibration 2015-6326-4

243 Root Street Suite 100 Olean, NY 14760

Customer					Instrument							
Customer N	lame: N	IJW Corporation	on		1	Manufacturer: Ludlum Measurements						
Address: 15 Hazelwood Drive Suite 112					j.	Model: 2241		SN: 196	664			
Amherst, NY 14228					ī	Detector Manufact	urer: Ludlum Me	easurements				
Customer P	Customer PO# Work Order: 2015-6326					Det. Model: 44-1	10	SN: PR2	56142			
Calibration M	Method: E	Electronic(*)			F	Procedure: SOF	P-06					
Instrument I	Received:	Within	Tolerance	Out of T	olerance	Repairs Required	Other (See	e Comments)				
Geotropis	sm	✓ Meter	Zero	✓ Mech. C	k	HV Readout	✓ Battery C	neck	VF	Reset		
✓ Audio		Windo	ow Status	✓ FS Resp	oonse	Linearity	✓ Alarm Set					
Temperature	e: 70.2 F	=	Humidity:	45%	Pr	essure: 28.3 in h	Нg	Altitude: 14	50 ft			
					Instrument	Calibration						
Calibration		Ins	strument Respor	nse		Calibration		Instrume	ent Respon	se		
Multiplier/Ran	Range Point As Found As Left	Tolerance	Multiplier/Range	Point	As Found	As	Left	Tolerance				
Ratemeter Mode	r*	40 cpm	40 cpm	40 cpm	36-44	Ratemeter Mode*	400 cpn	400 cpm	40	0 cpm	360-440	
Ratemeter Mode	•	4 kcpm	3.99 kcpm	3.99 kcpm	3.6-4.4	Ratemeter Mode*	40 kcpn	39.9 kcpm	39.9	kcpm	36-44	
Ratemeter Mode	•	400 kcpm	399 kcpm	399 kcpm	360-440	Scaler Mode*	40 cpn	1 40 cpm	4	0 cpm	36-44	
Scaler Mode*		400 cpm	400 cpm	400 cpm	360-440	Scaler Mode*	4 kcpn	3.992 kcpm	3.992	kcpm	3.6-4.4	
Scaler Mode*		40 kcpm	39.907 kcpm	39.907 kcpm	36-44	Scaler Mode*	400 kcpm	398.987 kcpm	398.987	kcpm	360-440	
				25/25/	Electronic Ins				011			
Pulser: 500-2	2 sn# 2201	106		Scaler: 22	200 sn# 28716							
		The second			Sources				1-1-2			
Isotope	Serial#		Туре					Efficiency	CF	Distance		
Am241 Cs137	UB992 UB994		Y Y			79.688 dpm	131062	5.6 %	17.86	0 inch		
28137	UB994		1			08.107 dpm	235181	9.9 %	10.10	0 inch		
Voltage: 1	400 V	Disc/Ser	s: 10 mV		nstrument Sta	itus						
oreage. I	100 V	DISC/ BCI	13. 10 mv		Alarm Statu	c					Salar Salar	
Rate Alarm	n: 300 kg	cpm	Rate A	lert: 200 kg		Scal Alarm:	300 kcts		a visit in the			
		42 50 50			Detector Stat	us		(Ostavaja voje)	/	<u> </u>		
CC: 100E-2	. D'	T: 0 usec	Oper.	V: 1400 V								
			i fallan		Comments							

Model 44-10 energy resolution = 11%, acceptable detector energy resolution is <13%

C1 1	MINE N		0		
Stater	nent	OI	Cer	mica	tior

MJW Technical Services, Inc certifies that the above instrument has been calibrated by standards traceable to the National institute of Standards and Technology or to the calibrator facilities of other International Standards organization members, or have been derived from accepted values of natural physical constants or have been derived by the ration type of calibration techniques. The calibration system conforms to the requirements ISO/IEC 17025 and ANSI N323. The Instrument listed above was inspected prior to shipment and it met all the manufacturer's published operating specifications. (MJW Technical Services is not responsible for damage incurred during shipment or use of this instrument).

Calibration Technician: (AL) Calibration Technician:	QA Technician:	Date: 10 2015
Calibration Date: 10/15/2015	Calibration Due: 10/15/2016	

Page: 1/2

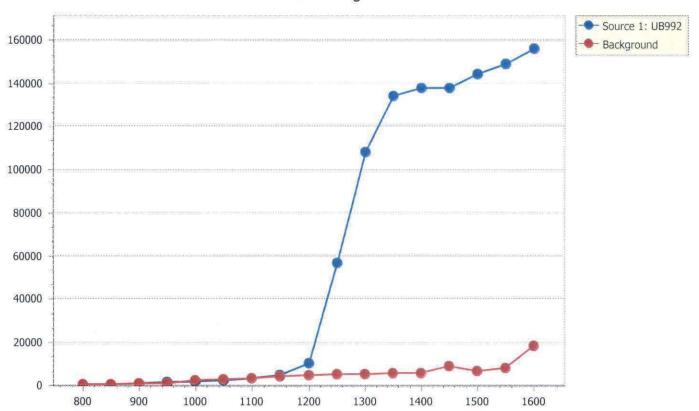


2015-6326-4

243 Root Street Suite 100 Olean, NY 14760

	Customer		Instrument				
Customer Name: MJ	W Corporation		Manufacturer: L	udlum Measurements			
	vood Drive		Model: 2241	SN:	196664		
Suite 112 Amherst,	NY 14228		Detector Manufacturer: Ludlum Measurements				
Customer PO#	Worl	k Order: 2015-6326	Det. Model: 44-10	SN:	PR256142		
Calibration Method: Electronic(*)			Procedure: SOP-0	6			
Instrument Received:	✓ Within Tolerance	Out of Tolerance	Repairs Required	Other (See Commer	its)		
Geotropism	✓ Meter Zero	✓ Mech. Ck	HV Readout	ு Battery Check	✓ Reset		
✓ Audio	Window Status	✓ FS Response	Linearity	✓ Alarm Set			
Temperature: 70.2 F	Humidity:	45%	Pressure: 28.3 in Hg	Altitude:	1450 ft		

Source Voltage Plateaus



Statement of Certification

MJW Technical Services, Inc certifies that the above instrument has been calibrated by standards traceable to the National institute of Standards and Technology or to the calibrator facilities of other International Standards organization members, or have been derived from accepted values of natural physical constants or have been derived by the ration type of calibration techniques. The calibration system conforms to the requirements ISO/IEC 17025 and ANSI N323. The Instrument listed above was inspected prior to shipment and it met all the manufacturer's published operating specifications. (MJW Technical Services is not responsible for damage incurred during shipment or use of this instrument).

Calibration Technic (AL)	ian: All M. L.	QA Technician:	Date: [070-15
Calibration Date:	10/15/2015	Calibration Due: 10/15/2016	

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2015-6361-1

243 Root Street Suite 100 Olean, NY 14760

		Cus	tomer				I	strument	17		
Customer Nan	ne: M	JW Corporati	on			Manufacturer: Ludium Measurements					
	15 Haze Suite 11	lwood Drive				Model: 2241-2 SN: 262641					
Amherst, NY 14228					1	Detector Manufac	turer: Ludlum N	Measurements			
Customer PO	Customer PO# Work Order: 2015-6361					Det. Model: 43-	90	SN: PR2	77930		2-Yellow
Calibration Me	ethod: E	lectronic(*)			1	Procedure: SO	P-06				
Instrument Re	eceived:	✓ Within	Tolerance	Out of	Tolerance	Repairs Required	d Other (Se	ee Comments)			
Geotropism	1	Meter	Zero	✓ Mech.	Ck	HV Readout	✓ Battery (Check	~	Reset	
✓ Audio		Wind	ow Status	✓ FS Res	ponse	Linearity	✓ Alarm S	et			
Temperature:	69.1 F		Humidity:	41%	Pr	ressure: 28.6 in	Hg	Altitude: 14	50 ft		
	Tarley !			Out Market	Instrument	t Calibration					RETURE
		Ins	strument Respo	nse		Calibratio	n	Instrum	ent Respons	se	
Multiplier/Range	r/Range Point As Found As Left Tolerance		Tolerance	e Multiplier/Range	Point	As Found	Found As Left		Tolerance		
Ratemeter Mode*		40 cpm	39.3 cpm	39.3 cpm	36-44	Ratemeter Mode*	400 cp	om 400 cpm	4	00 cpm	360-440
Ratemeter Mode*		4 kcpm	3.96 kcpm	3.96 kcpm	3.6-4.4	Ratemeter Mode*	40 kcp	om 39.6 kcpm	39.	6 kcpm	36-44
Ratemeter Mode*		400 kcpm	396 kcpm	396 kcpm	360-440	Scaler Mode*	40 cp	m 40 cpm		40 cpm	36-44
Scaler Mode*		400 cpm	396 cpm	396 cpm	360-440	140 Scaler Mode*	4 kcpm	n 3.968 kcpm	3.968 kcpm	3.6-4.4	
Scaler Mode*		40 kcpm	39.677 kcpm	39.677 kcpm	36-44	Scaler Mode*	400 kcp	m 396.678 kcpm	396.67	8 kcpm	360-440
		ERECO			Electronic Ins						
Pulser: 500-2 s	n# 2200	99		Scaler: 2	200 sn# 30442	8					
					Sources						Z NA
Isotope	Serial#		Туре		A	ctivity	Response	Efficiency	CF	Distance	
Am241	C7-660		a 4pi		11022	29.264 dpm	25300	23.0 %	4.35	0 inch	
Pu239	C7-635		a 4pi		11142	27.358 dpm	26250	23.6 %	4.24	0 inch	
Th230	C7-643		a 4pi		993	10.909 dpm	22370	22.5 %	4.44	0 inch	
					Instrument Sta	atus			MAL C	a la	4
Disc/Sens: 1	10 mV										
Rate Alarm:	900 1	TO M	Data *	lower FAA :	Alarm Statu		. 000		11 - 17	1 1 2 3	B-1/4-1
wace Alaim:	ouu Ko	-bw	Rate A	lert: 500 k		OUTSIDE ASSESSMENTS	: 990 kcpm				
					Detector Stat	us					

Statement of Certification

Calibration Technician: (GH)	QA Technician: Alla M. Jun	Date: /1/3/15
Calibration Date: 11/03/2015	Calibration Due: 11/03/2016	-



2015-6361-2

243 Root Street Suite 100 Olean, NY 14760

	Cus	stomer				I	nstrument			
Customer Name:	MJW Corporat	on			Manufacturer:	Ludlum Measi	urements			
	lazelwood Drive				Model: 2241-2	!	SN: 262	641		
	erst, NY 14228				Detector Manufa	cturer: Ludlum I	Measurements			
Customer PO#		Wor	k Order: 2015-	6361	Det. Model: 44	-10	SN: PR	288429		1-Red
Calibration Method: Electronic(*)					Procedure: SC	OP-06				
Instrument Receiv	red: Within	n Tolerance	Out of To	olerance	Repairs Require	d Other (S	ee Comments)			
Geotropism	Mete	r Zero	✓ Mech. C	k	HV Readout	✓ Battery	Check	~	Reset	
✓ Audio	Wind	ow Status	✓ FS Resp	onse	Linearity	✓ Alarm S	et			
Temperature: 69.	1 F	Humidity:	41%	P	ressure: 28.6 ir	Hg	Altitude: 1	450 ft		
			A PRO	Instrumen	t Calibration			1		
	Calibration In		trument Respon	ise		Calibratio	on	Instrument Respo		se
Multiplier/Range	Point	As Found	As Left	Tolerance	Multiplier/Range	e Point	As Foun	d A	s Left	Tolerance
Ratemeter Mode*	40 cpm	39.3 cpm	39.3 cpm	36-44	Ratemeter Mode*	400 c	pm 400 cpm	1 4	00 cpm	360-440
Ratemeter Mode*	4 kcpm	3,96 kcpm	3.96 kcpm	3.6-4.4	Ratemeter Mode*	40 kc	pm 39,6 kcpm	39.	6 kcpm	36-44
Ratemeter Mode*	400 kcpm	396 kcpm	396 kcpm	360-440	Scaler Mode*	40 c	pm 40 cpm	1	40 cpm	36-44
Scaler Mode*	400 cpm	396 cpm	396 cpm	360-440	Scaler Mode*	4 kc	pm 3.968 kcpm	3.96	8 kcpm	3.6-4.4
Scaler Mode*	40 kcpm	39.677 kcpm	39.677 kcpm	36-44	Scaler Mode*	400 kg	pm 396.678 kcpm	396.67	8 kcpm	360-440
Mark 1 Equil 1				Electronic In						100
Pulser: 500-2 sn# 2	20099		Scaler: 22	200 sn# 30442	28					
				Source	Y				42 July	11-15-50
Isotope Ser	15500	Туре		A	ectivity	Response	Efficiency	CF	Distance	
Am241 UB		Y		23438	63.800 dpm	176266	7.5 %	13.33	0 inch	
Cs137 UB	994	Y		23715	61.372 dpm	268517	11.3 %	8.85	0 inch	
	DO FEED IN		li li	nstrument St	atus					
Disc/Sens: 10 m	NV V									
				Alarm State	527			YET A		ALC: NO.
Rate Alarm: 500	Kcpm	Rate Al	ert: 300 kd			m: 900 kcpm				
C: 100e-2	DM . 0			Detector Sta	tus				13 30	
.c. 100e-2	DT: 0 usec	Oper.	V: 1000 V N							
			acceptable	Comment	S					

Statement of Certification

Calibration Technician:	QA Technician: Allow M. Zon	Date: 11/3/15
Calibration Date: 11/03/2015	Calibration Due: 11/03/2016	

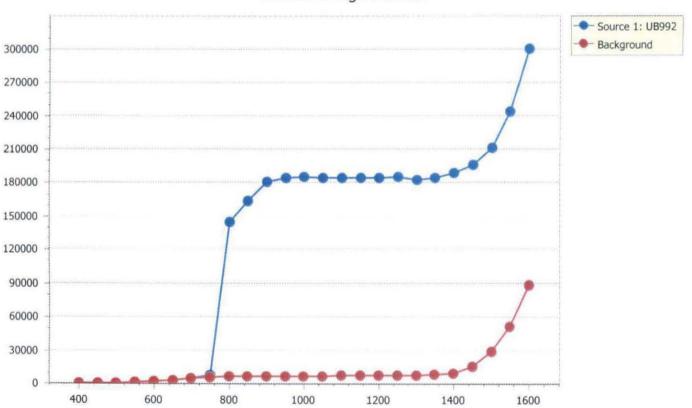


2015-6361-2

243 Root Street Suite 100 Olean, NY 14760

Customer			Instrument				
Customer Name: MJ	W Corporation		Manufacturer:	_udlum Measurements			
	vood Drive		Model: 2241-2 SN: 262641 Detector Manufacturer: Ludlum Measurements				
Suite 112 Amherst,	NY 14228						
Customer PO#	Wor	k Order: 2015-6361	Det. Model: 44-10	SN:	PR288429	1-Red	
Calibration Method: Ele	ectronic(*)		Procedure: SOP-0	06			
Instrument Received:	✓ Within Tolerance	Out of Tolerance	Repairs Required	Other (See Comme	nts)		
Geotropism	Meter Zero	✓ Mech. Ck	HV Readout	✓ Battery Check	✓ Reset		
✓ Audio	Window Status	✓ FS Response	Linearity	✓ Alarm Set			
Temperature: 69.1 F	Humidity:	41%	Pressure: 28.6 in Hg	Altitude	: 1450 ft		

Source Voltage Plateaus



Statement of Certification

Calibration Technician: (GH)	QA Technician: Date: 11/3/15	
Calibration Date: 11/03/2015	Calibration Due: 11/03/2016	