

Calibration Certificate ID Number: C801F66072-0

Customer: Chuck Mikaitis

Cabrera Services, Inc.

473 Silver Lane

East Hartford, CT 06118-

Instrument

Serial Number

Bicron Model MicroRem

C801F

Precision Check							
Test 1	Test 2	Test 3	Mean	Results			
4.00 mrem/hr	4.00 mrem/hr	4.00 mrem/hr	4.00 mrem/hr	Satisfactory			

Accuracy Check					
Range	Target Value	As Found	As Left		
X1000	160 mrem/hr	160 mrem/hr	160 mrem/hr		
X1000	40 mrem/hr	40 mrem/hr	40 mrem/hr		
X100	16 mrem/hr	15.5 mrem/hr	16.5 mrem/hr		
X100	4 mrem/hr	3.5 mrem/hr	4.0 mrem/hr		
X10	1.6 mrem/hr	1.6 mrem/hr	1.6 mrem/hr		
X10	0.4 mrem/hr	0.4 mrem/hr	0.4 mrem/hr		
X1	160 µrem/hr	200 µrem/hr *	160 µrem/hr		
X1	40 µrem/hr	45 μrem/hr #	40 µrem/hr #		
X0.1	16 µrem/hr	18 μrem/hr #	16 µrem/hr #		
X0.1	4 µrem/hr	4.5 µrem/hr #	4 µrem/hr#		

Readings with * indicate ranges where As-Found readings are >20% of Target value. Readings with ** indicate As-left readings are >10.00% of Target value Readings with # indicate ranges where pulser was used.

MTE Instrument Type	Model	CalDueDate
Pulser	Ludlum 500-4 SN: 98756	06/25/2013

Outer Physical Check: Pass
Internal Check: Pass
Geotropism Check: Pass

Mechanical Zero: Pass
Tap Test: Pass

Calibrated by:

IS Cle

QA Review: 15-3

Calibration Date: 01/29/2013 Expires: 01/29/2014

Atmospheric Conditions - Temperature: 70°F Humidity: 17% Barometric Pressure: 30.06"hg

This calibration was performed by RSCS using a NIST Traceable radiation source (Cs-137 Beam Source SN S-1110), in conformance to the following standards: ANSI N323A (1997). RSCS New Hampshire Radioactive Material License Number: 381R. RSCS calibration services are performed in accordance with the RSCS Radiation Protection Program Manual and Standard Operating Procedure. This calibration certificate shall not be reproduced except in full without the express written consent of RSCS, Inc Estimated uncertainty for measurements collected using the J.L. Shepherd and Associates Model 89 calibrator: 2.7% Estimated uncertainty for measurements collected using the Tech Ops Model 773 calibrator: 6.0%