

Leak Test Record  
NRC License 52-25430-01

Leak Tested For:  
Leak Tested By:

Puerto Rico Asphalt  
David Rhoe

Standard Source (NIST traceable):  
Standard Activity (uCi):  
Standard Date

Am-241	Cs-137 NES-139S
1.145	0.105
15-Nov-98	09-Sep-88

Date of the Leak Test:  
Decay Activity uCi (from decay chart):  
Standard (dpm):

	12-Jul-19
1.10766	0.05148
2459005.2	114285.6

Instrument used to count wipe sample:  
Instrument Model Number:  
Instrument Serial Number:

Ludlum  
2200  
185815

NIST Traceable Standard (cpm)  
Counting Efficiency:  
Counting Efficiency in percentage (%):  
Counting time (minutes)  
Background (cpm)  
Minimum Detectable Activity:

139814	13214
0.06	0.12
5.69	11.56
1	1
135	135
1.302E-04	6.402E-05

Wipe (Smear) Test: All external or accessible surfaces of the source or housing are wiped with a piece of filter paper or other absorbent material which has been moistened with an appropriate solvent and the activity removed is measured.  
Note: Background counts were not subtracted from wipe test sample to calculate sample activity.

Source ID and Serial Number  
Am-241 & Cs-137 SnM331007182

Wipe Test  
131

Sample Activity  
0.00104

Gamma  
Sample Activity  
0.00051

This test reveals that 0.005 microcuries or less was present as removable contamination.  
Should the removable contamination exceed 0.005 microcuries, the source must be removed from use and necessary measures taken according to NRC regulations.

  
David Rhoe Health/Medical Physicist

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Leak Tested For:	Puerto Rico Asphalt	
Leak Tested By:	David Rhoe	
Standard Source (NIST traceable):	Am-241	Cs-137 NES-139S
Standard Activity (uCi):	1.145	0.105
Standard Date	15-Nov-98	09-Sep-88
Date of the Leak Test:	11-Jan-19	
Decay Activity uCi (from decay chart):	1.10857	0.0521
Standard (dpm):	2461025.4	115662
Instrument used to count wipe sample:	Perkin Elmer	
Instrument Model Number:	Wallac Wizard2 2470 Automatic Gamma Counter	
Instrument Serial Number:	8106671	
NIST Traceable Standard (cpm)	780647	28726
Counting Efficiency:	0.32	0.25
Counting Efficiency in percentage (%):	31.72	24.84
Counting time (minutes)	1	1
Background (cpm)	81	81
Minimum Detectable Activity:	1.807E-05	2.308E-05

Wipe (Smear) Test: All external or accessible surfaces of the source or housing are wiped with a piece of filter paper or other absorbent material which has been moistened with an appropriate solvent and the activity removed is measured.  
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Source ID and Serial Number	Wipe Test	Sample Activity	Gamma	Sample Activity
Am-241 & Cs-137 MC-3 Sn30324	85	0.00012		0.00015

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Standard (dpm):	2459005.2	114285.6
Instrument used to count wipe sample:	Ludlum	
Instrument Model Number:	2200	
Instrument Serial Number:	185815	
NIST Traceable Standard (cpm)	139814	13214
Counting Efficiency:	0.06	0.12
Counting Efficiency in percentage (%):	5.69	11.56
Counting time (minutes)	1	1
Background (cpm)	135	135
Minimum Detectable Activity:	1.302E-04	6.402E-05

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Note: Background counts were not subtracted from wipe test sample to calculate sample activity.

Source ID and Serial Number	Wipe Test	Sample Activity	Gamma Sample Activity
Am-241 & Cs-137 MC-3 Sn30324	156	0.00124	0.00061

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Standard (dpm):	2461025.4	115662
Instrument used to count wipe sample:	Perkin Elmer	
Instrument Model Number:	Wallac Wizard2 2470 Automatic Gamma Counter	
Instrument Serial Number:	8106671	
NIST Traceable Standard (cpm)	780647	28726
Counting Efficiency:	0.32	0.25
Counting Efficiency in percentage (%):	31.72	24.84
Counting time (minutes)	1	1
Background (cpm)	81	81
Minimum Detectable Activity:	1.807E-05	2.308E-05

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Source ID and Serial Number	Wipe Test	Sample Activity	Gamma Sample Activity
Am-241 & Cs-137 SnM331007182	98	0.00014	0.00018

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