

August 23, 2011

Mr. Jeremy Tapp  
U. S. Nuclear Regulatory Commission  
Region III  
2443 Warrenville Road  
Lisle, IL 60532-4351

**SUBJECT: ORISE CONTRACT NO. DE-AC05-06OR23100**  
**LETTER REPORT FOR ANALYTICAL RESULTS FOR THREE SOIL SAMPLES**  
**FROM THE UNIVERSITY OF MICHIGAN FORD REACTOR, ANN ARBOR,**  
**MICHIGAN**  
**[INSPECTION REPORT NO. 2011-001][DOCKET NO. 05000002]**  
**(RFTA NO. 11-001), DCN: 2026-LR-02-0**

Dear Mr. Tapp:

The Oak Ridge Institute for Science and Education (ORISE) received three soil samples on August 15, 2011 from the Ford Reactor at the University of Michigan in Ann Arbor, Michigan. The samples were analyzed according to the NRC 303 form supplied with the samples. The sample identification and collection data are presented in Table 1 and the gamma spectroscopy data are presented in Table 2. The pertinent procedure reference is included with the data table.

ORISE's Quality Control (QC) requirements were met for these analyses. The QC files are available for your review upon request.

My contact information is listed below. You may also contact Dale Condra at 865.241.3242 with any questions or comments.

Sincerely,



Wade Ivey, Manager  
Laboratory

WPI:bj

Enclosures

c: T. Carter, NRC/FSME/DWMEP T-8F5 W. Snell, NRC Region III  
S. Nesmith, NRC/FSME/PBPA/TWFN 8A23 File 2026

Electronic: S. Roberts, ORISE T. Vitkus, ORISE

Distribution approval and concurrence:	Initials
Technical Review	<i>Wade Ivey</i>
Quality Review	<i>SB</i>

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**TABLE 1**

**SAMPLE IDENTIFICATION  
AND COLLECTION DATA  
FORD REACTOR, UNIVERSITY OF MICHIGAN  
ANN ARBOR, MICHIGAN**

<b>ORISE Sample ID</b>	<b>NRC Region III Sample ID</b>	<b>Collection Date</b>	<b>Collection Time</b>
2026S0005	UM-11-1-01	8/10/2011	11:45
2026S0006	UM-11-1-02	8/10/2011	12:00
2026S0007	UM-11-1-03	8/10/2011	12:15

**TABLE 2**

**CONCENTRATIONS OF SELECTED GAMMA EMITTING RADIONUCLIDES  
IN SOIL SAMPLES  
BY GAMMA SPECTROSCOPY CP1, REVISION 17  
FORD REACTOR, UNIVERSITY OF MICHIGAN  
ANN ARBOR, MICHIGAN**

ORISE Sample ID	NRC Region III Sample ID	Radionuclide Concentrations, TPU <sup>a</sup> , and MDCs <sup>b</sup> (pCi/g)		
		Co-60	Cs-137	Ag-108m
2026S0005	UM-11-1-01	0.17 ± 0.05 , 0.10	0.01 ± 0.02 , 0.05	0.10 ± 0.02 , 0.02
2026S0006	UM-11-1-02	3.91 ± 0.24 , 0.06	0.00 <sup>c</sup> ± 0.04 , 0.06	0.00 ± 0.02 , 0.04
2026S0007	UM-11-1-03	3.63 ± 0.24 , 0.09	0.27 ± 0.04 , 0.06	1.44 ± 0.11 , 0.05

<sup>a</sup>Uncertainties represent the 95% confidence level, based on total propagated uncertainties.

<sup>b</sup>The MDCs appear after the commas.

<sup>c</sup>Zero values are due to rounding or sample and background counts being equal.