

ORISE
OAK RIDGE INSTITUTE FOR SCIENCE AND EDUCATION

August 4, 2006

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

SUBJECT: ANALYTICAL RESULTS FOR SIX SOIL SAMPLES, BATCHES ONE AND TWO, FROM BIG ROCK POINT NUCLEAR STATION, CHARLEVOIX, MICHIGAN [INSPECTION REPORT NO. 050-00155/2006-001] (RFTA NO. 06-001)

Dear Mr. Snell:

The Oak Ridge Institute for Science and Education (ORISE) received Batch One on July 7, 2006, consisting of three soil samples, and Batch Two on July 26, 2006, consisting of three soil samples that are associated with the Big Rock Point Nuclear Station in Charlevoix, Michigan. The six soil samples were analyzed by gamma spectroscopy (GS). Sample identification and collection data are presented in Table 1. The primary isotopes of concern were cobalt-60 and cesium-137. The GS data are presented in Table 2. The pertinent procedure references are provided in the specific tables.

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

My contact information is listed below. You may also contact Wade Ivey at 865.576.9184 with any questions or comments.

Sincerely,



Dale Condra, Manager
Laboratory

RDC:WPI:ar

Enclosure

c: B. Watson, NMSS/DWMEP/DD/SP 7E18
E. Knox-Davin, NRC/NMSS/TWFN 8A23
G. Bonano, NRC Region III

E. Abelquist, ORISE
S. Kirk, ORISE
File 1715

Distribution approval and concurrence :	Initials
Technical Management Team Member	<i>Rev for JSK</i>
Quality Manager	<i>ATP</i>

Voice: 865.241.3242

Fax: 865.241.3248

E-mail: CondraD@orau.gov

TABLE 1

**SAMPLE IDENTIFICATIONS
AND COLLECTION DATA
BIG ROCK POINT NUCLEAR STATION
CHARLEVOIX, MICHIGAN**

ORISE Sample ID	NRC Region III Sample ID	Collection Date	Collection Time
1715S0001	BRP-06-1-01	06/02/2006	4:24 PM
1715S0002	BRP-06-1-02	06/02/2006	4:34 PM
1715S0003	BRP-06-1-03	06/02/2006	4:41 PM
1715S0004	BRP-06-2-1	07/05/2006	2:50 PM
1715S0005	BRP-06-2-2	07/05/2006	2:58 PM
1715S0006	BRP-06-2-3	07/05/2006	3:05 PM

TABLE 2

**CONCENTRATIONS OF SELECTED
GAMMA EMITTING RADIONUCLIDES
IN SOIL SAMPLES
BY GAMMA SPECTROSCOPY CP1, REVISION 15
BIG ROCK POINT NUCLEAR STATION
CHARLEVOIX, MICHIGAN**

ORISE Sample ID	NRC Region III Sample ID	Radionuclide Concentrations ^a (pCi/g)	
		Co-60	Cs-137
1715S0001	BRP-06-1-01	0.00 ^b ± 0.02 ^c	0.00 ± 0.01
1715S0002	BRP-06-1-02	0.01 ± 0.02	0.00 ± 0.01
1715S0003	BRP-06-1-03	0.00 ± 0.02	0.00 ± 0.01
1715S0004	BRP-06-2-1	0.48 ± 0.05	0.57 ± 0.04
1715S0005	BRP-06-2-2	0.02 ± 0.02	0.04 ± 0.02
1715S0006	BRP-06-2-3	0.06 ± 0.05	0.04 ± 0.02

^aThe range of MDCs for the selected radionuclides is 0.02 pCi/g to 0.04 pCi/g.

^bZero values are due to rounding.

^cUncertainties represent the 95% confidence level, based on total propagated uncertainties.