

September 15, 2006

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

**SUBJECT: ANALYTICAL RESULTS FOR ONE WATER SAMPLE, BATCH ONE, FROM THE VICINITY OF THE PRAIRIE ISLAND STATION, RED WING, MINNESOTA
[INSPECTION REPORT NO. 050-00282/2006-004] (RFTA NO. 06-001)**

Dear Mr. Snell:

The Oak Ridge Institute for Science and Education (ORISE) received Batch One, consisting of one water sample, September 5, 2006 which was collected in the vicinity of the Prairie Island Station in Red Wing, Minnesota. The one water sample was analyzed for tritium to a minimum detectable concentration of 190 pCi/L using a liquid scintillation analyzer. The sample was also analyzed by gamma spectroscopy (GS). The sample identification and collection data are presented in Table 1. The GS data are presented in Table 2. The tritium data are presented in Table 3. The pertinent procedure references are provided in the specific tables.

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 Wade Ivey at 865.576.9184 with any questions or comments.

Sincerely,



Dale Condra, Manager
Laboratory

RDC:WPI:ar

Enclosures

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TABLE 1

**SAMPLE IDENTIFICATION
AND COLLECTION DATA
PRAIRIE ISLAND STATION
RED WING, MINNESOTA**

ORISE Sample ID	NRC Region III Sample ID	Collection Time	Collection Date
1719W0001	P-06-2-01	08/08/06	11:30 AM

TABLE 2

**CONCENTRATIONS OF SELECTED
GAMMA EMITTING RADIONUCLIDES
IN A WATER SAMPLE
BY GAMMA SPECTROSCOPY CP1, REVISION 15
PRAIRIE ISLAND STATION
RED WING, MINNESOTA**

ORISE Sample ID	NRC Region III Sample ID	Radionuclide Concentrations ^a (pCi/L)			
		Co-58	Co-60	Cs-134	Cs-137
1719W0001	P-06-2-01	-4.5 ± 5.0 ^b	0.2 ± 4.5	2.3 ± 4.6	0.0 ^c ± 4.1

^aThe range of MDCs for the selected radionuclides is 7.1 pCi/L to 8.3 pCi/L.

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

^cZero value is due to rounding.

TABLE 3

**CONCENTRATIONS OF TRITIUM
IN A WATER SAMPLE
BY LIQUID SCINTILLATION ANALYSIS
AP2, REVISION 15; CP4, REVISION 3
PRAIRIE ISLAND STATION
RED WING, MINNESOTA**

ORISE Sample ID	NRC Region III Sample ID	Tritium Concentration, TPU, and MDC^a (pCi/L)
1719W0001	P-06-2-01	22,520 ± 480 ^b (190)

^aThe MDC is in parentheses.

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