### PERCENT SOLIDS IN SOIL SAMPLES SP3, REVISION 0 USDA- NATIONAL ANIMAL DISEASE CENTER AMES, IOWA

ESSAP Sample ID	NRC Region I Sample ID	Percent Solids <sup>a</sup>
840S001	#1 Soil	84.7
840S002	#2 Soil	85.7
840S003	#3 Soil	85.4
840S004	#4 Soil	81.1
840S005	#5 Soil	85.0

<sup>a</sup>Percent solids was calculated by:

Percent Solids = 
$$\left(\frac{dry \ weight}{wet \ weight}\right) \times 100$$

# CONCENTRATIONS OF CARBON-14 IN SOIL SAMPLES BY LIQUID SCINTILLATION COUNTING AP6, REVISON 12; CP4, REVISION 1 USDA- NATIONAL ANIMAL DISEASE CENTER AMES, IOWA

ESSAP Sample ID	NRC Region I Sample ID	Carbon-14 <sup>a</sup> Concentrations (pCi/g-wet weight)
840S001	#1 Soil	$-0.60 \pm 0.81^{b}$
840S002	#2 Soil	$-0.27 \pm 0.86$
840S003	#3 Soil	$-0.57 \pm 0.75$
840S004	#4 Soil	$-0.07 \pm 0.70$
840S005	#5 Soil	$-0.34 \pm 0.81$

<sup>a</sup>The average MDC for carbon-14 for a 60 minute count using ~1 g of sample is 1.4 pCi/g. <sup>b</sup>Uncertainties represent the 95% confidence level, based on total propagated uncertainties.

# CONCENTRATION OF CARBON-14 IN A WATER SAMPLE BY LIQUID SCINTILLATION COUNTING NON-ROUTINE AP9, REVISION 0; CP4, REVISION 1 USDA- NATIONAL ANIMAL DISEASE CENTER AMES, IOWA

ESSAP Sample ID	NRC Region I Sample ID	Carbon-14 <sup>a</sup> Concentration (pCi/L)
840W001	#1 Water	$-2 \pm 18^{b}$

<sup>a</sup>The average MDC for carbon-14 for a 60 minute count using a 0.05 L sample is 30 pCi/L. <sup>b</sup>Uncertainties represent the 95% confidence level, based on total propagated uncertainties.

# CONCENTRATIONS OF TRITIUM IN SOIL SAMPLES BY LIQUID SCINTILLATION ANALYSIS AP6, REVISION 12; CP4, REVISION 1 USDA- NATIONAL ANIMAL DISEASE CENTER AMES, IOWA

ESSAP Sample ID	NRC Region I Sample ID	Tritium <sup>a</sup> Concentrations (pCi/g-wet weight)
840S001	#1 Soil	$0.3 \pm 1.3^{b}$
840S002	#2 Soil	$-1.2 \pm 1.5$
840S003	#3 Soil	$-0.5 \pm 1.4$
840S004	#4 Soil	$-1.2 \pm 1.4$
840S005	#5 Soil	$0.3 \pm 1.4$

<sup>a</sup>The average MDC for tritium for a 60 minute count using ~1 g of sample is 2.4 pCi/g. <sup>b</sup>Uncertainties represent the 95% confidence level, based on total propagated uncertainties.

### CONCENTRATION OF TRITIUM IN A WATER SAMPLE BY LIQUID SCINTILLATION ANALYSIS AP2, REVISION 12; CP4, REVISION 1 USDA- NATIONAL ANIMAL DISEASE CENTER AMES, IOWA

ESSAP Sample ID	NRC Region I Sample ID	Tritium <sup>a</sup> Concentration (pCi/L)
840W001	#1 Water	$0^{b} \pm 220^{c}$

<sup>a</sup>The average MDC for tritium for a 60 minute count using a 0.01 L sample is 370 pCi/L. <sup>b</sup>Zero value due to rounding.

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

# CONCENTRATIONS OF NICKEL-63 IN SOIL SAMPLES BY LIQUID SCINTILLATION ANALYSIS NON-ROUTINE AP12, REVISION 2; CP4, REVISION 1 USDA - NATIONAL ANIMAL DISEASE CENTER AMES, IOWA

ESSAP Sample ID	NRC Region I Sample ID	Ni-63 Concentrations (pCi/g-dry weight)
840S001	#1 Soil	$-0.6 \pm 2.2^{b}$
840S002	#2 Soil	$-0.7 \pm 2.2$
840S003	#3 Soil	$2.5 \pm 2.3$
840S004	#4 Soil	$-2.0 \pm 2.2$
840S005	#5 Soil	$0.3 \pm 2.2$

<sup>a</sup>The average MDC for a 60 minute count using ~0.5 g sample is 3.8 pCi/g.

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

# CONCENTRATION OF NICKEL-63 IN A WATER SAMPLE BY LIQUID SCINTILLATION ANALYSIS NON-ROUTINE AP12, REVISION 2; CP4, REVISION 1 USDA- NATIONAL ANIMAL DISEASE CENTER AMES, IOWA

ESSAP Sample ID	NRC Region I Sample ID	Ni-63 <sup>a,b</sup> Concentration (pCi/L)
840W001	#1 Water	$-30 \pm 20^{\circ}$

<sup>a</sup>The average MDC for a 60 minute count for a 0.05 L sample is 35 pCi/L.

<sup>b</sup>Analysis performed on filtered portion of sample.

°Uncertainties represent the 95% confidence level, based on total propagated uncertainties.