Ammonia/Fluoride Distillation Study Illustration

SAMPLE FOR COMPARISON

Split the sample into 2 aliquots and spike each

Analyze DISTILLED Spiked Sample DUP Duplicate

Distill

Split the spiked sample duplicate into another 2 aliquots

Distill

Analyze Undistilled Spiked Sample

Split the spiked sample into another 2 aliquots

Calculations

To determine whether the study shows comparable results without distillation, the relative percent difference (RPD) between the distilled and undistilled spikes **must be ≤ 20%**

│ DISTILLED Spiked Sample - Undistilled Spiked Sample │ X 100

 Average of DISTILLED Spiked Sample and Undistilled Spiked Sample = RPD of distilled and undistilled spike

│ DISTILLED Spiked Dup - Undistilled Spiked Dup │ X 100 = RPD of distilled and undistilled spike duplicate

 Average of DISTILLED Spiked Dup and Undistilled Spiked Dup

RPD of the spike and spike duplicate **must be ≤20%:**

│ DISTILLED Spiked Sample - DISTILLED Spiked Dup│ X 100 = RPD of distilled spike and distilled spike duplicate

 Average of DISTILLED Spiked Sample and DISTILLED Spiked Dup

Analyze Undistilled Spiked Sample DUP

Spiked Sample Duplicate

Spiked Sample

Analyze DISTILLED Spiked Sample