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CASE NARRATIVE

Weston Solutions

Project Name: Ft Meade Tipton Airfield Parcel RI - PO 0111169

Project # N/A

Chemtech Project # Q1588

Test Name: Metals ICP-TAL,Mercury

A. Number of Samples and Date of Receipt:

1 Water sample was received on 03/17/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Hardness, Total, Mercury, Metals ICP-TAL, METALS-TAL and TOC. This data package contains results for Metals ICP-TAL,Mercury.

C. Analytical Techniques:

The analysis of Metals ICP-TAL was based on method 6020B, digestion based on method 3010 (waters). The analysis and digestion of Mercury was based on method 7470A.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike (FRAC-TANK-FMI120MS) analysis met criteria for all samples except for Mercury due to matrix interference.

The Matrix Spike (TAPFTA-MW01D-031425-00-T1MS) analysis met criteria for all samples except for Arsenic, Barium, Calcium, Copper, Manganese, Potassium, Silver due to matrix interference.

The Matrix Spike Duplicate (FRAC-TANK-FMI120MSD) analysis met criteria for all samples except for Mercury due to matrix interference.

The Matrix Spike Duplicate (TAPFTA-MW01D-031425-00-T1MSD) analysis met criteria for all samples except for Arsenic, Copper, Manganese, Potassium, Silver, Zinc due to matrix interference.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

The Serial Dilution met the acceptable requirements.

E. Calculations:

Calculation for ICP-MS Water Sample:

$$\text{Concentration or Result } (\mu\text{g/L}) = C \times \frac{V_f}{V_i} \times \text{DF}$$



Where,

C = Instrument value in ppb (The average of all replicate integrations)

Vf = Final digestion volume (mL)

Vi = Initial aliquot amount (mL) (Sample amount taken in prep)

DF = Dilution Factor

Calculation for Hg Water Sample:

Concentration or Result ($\mu\text{g/L}$) = C x DF

Where,

C = Instrument response in $\mu\text{g/L}$ from the calibration curve.

DF = Dilution Factor

F. Additional Comments:

Collision cell is being used to remove potential interferences. The analytes Na, Mg, Al, K, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As are being analyzed with collision cell and analytes Be, B, Ca, Ti, Se, Sr, Zr, Mo, Ag, Cd, Sn, Sb, Ba, Tl, Pb, U are being analyzed with Non-Collision Cell. Helium gas is used for the Collision Cell analysis.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature _____