CASE NARRATIVE

Weston Solutions
Project Name: Ft Meade Tipton Airfield Parcel RI - PO 0111169
Project # N/A
Chemtech Project # Q1193
Test Name: Metals ICP-TAL,Mercury

A. Number of Samples and Date of Receipt:
2 Water samples were received on 01/25/2025.

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 (TAPIAL2-MW01-012425-00-T2DUP) analysis met criteria for all
samples except for Aluminum due to matrix interference.
The Matrix Spike (TAPIAL2-MW01-012425-00-T2MS) analysis met criteria for all
samples except for Arsenic, Iron, Potassium, Silver, Sodium due to matrix interference.
The Matrix Spike Duplicate (TAPIAL2-MW01-012425-00-T2MSD) analysis met criteria
for all samples except for Aluminum, Arsenic, Calcium, Iron, Potassium, Silver, Sodium
due to matrix interference.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.
The Serial Dilution met criteria for all samples.

E. Calculations:

Calculation for ICP-MS Water Sample:

$$\text{Concentration or Result (µg/L)} = C \times \frac{Vf}{Vi} \times DF$$

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 (µg/L) =   C x DF
Where,
       C   = Instrument response in µg/L from the calibration curve.
       DF = Dilution Factor

F. Additional Comments:
In analytical sequence LB134616, The % recovery was outside of acceptance limit for Nickel of LLCCV, Recovery failing marginally so no corrective action was taken.

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_____