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CASE NARRATIVE

Weston Solutions
Project Name: Ft Meade Tipton Airfield Parcel RI - PO 0111169
Project # N/A
Chemtech Project # P5242
Test Name: Metals ICP-TAL

A. Number of Samples and Date of Receipt:
2 Solid samples were received on 11/23/2024.

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

C. Analytical Techniques:
The analysis of Metals ICP-TAL was based on method 6020B and digestion based on method 3050 (soils).

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Blank Spike met requirements for all samples.
The Duplicate (TAPIAL1-SB04D-4-112224-00-T1DUP) analysis met criteria for all samples except for Copper, Nickel, Zinc due to matrix interference.
The Duplicate (TAPIAL1-SB04D-4-112224-00-T1MSD) analysis met criteria for all samples except for Nickel due to matrix interference.
The Matrix Spike (TAPIAL1-SB04D-4-112224-00-T1MS) analysis met criteria for all samples except for Antimony, Arsenic, Beryllium, Cadmium, Cobalt, Nickel, Selenium, Silver due to matrix interference.
The Matrix Spike Duplicate (TAPIAL1-SB04D-4-112224-00-T1MSD) analysis met criteria for all samples except for Arsenic, Beryllium, Cadmium, Cobalt, Nickel, Selenium, Silver, Thallium due to matrix interference..
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.
The Serial Dilution (TAPIAL1-SB04D-4-112224-00-T1L) met criteria for all samples except for Chromium, Iron, Manganese due to unknown interference.

E. Calculation for ICP-MS Soil Sample:

Conversion of Results from µg /L or ppb to mg/kg :

$$\text{Concentration (mg/kg)} = C \times \frac{Vf}{W \times S} \times DF / 1000$$

Where,

C = Instrument value in ppb (The average of all replicate integrations)
Vf = Final digestion volume (mL)
W = Initial aliquot amount (g) (Fraction of Sample amount taken in prep)
S = % Solids / 100 (Fraction of Percent Solids)
DF = Dilution Factor

F. Additional Comments:

Samples P5242-01 and P5242-02 are reported with straight 5X dilution due to high interferent samples.

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_____