



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CASE NARRATIVE

Weston Solutions, Inc.

Project Name: RFP 905

Project # N/A

Order ID # Q3447

Test Name: Mercury, Metals ICP-TAL

A. Number of Samples and Date of Receipt:

8 Solid samples were received on 10/23/2025.

B. Parameters:

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

C. Analytical Techniques:

The analysis of Metals ICP-TAL was based on method 6010D, digestion based on method 3050 (soils). The analysis and digestion of Mercury was based on method 7471B.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

Sample P001-TW1-251023-01 was diluted due to high concentrations for Iron & Sample

P001-TW2-251023-01 was diluted due to high concentrations for Mercury & Sample

P001-TW3-251023-01 was diluted due to high concentrations for Copper and Lead.

The Blank Spike met requirements for all compounds.

The Duplicate analysis met criteria for all compounds.

The Matrix Spike (EO-01-102325MS) analysis met criteria for all compounds except for Antimony, Beryllium, Selenium, Silver and Vanadium due to Chemical Interference during Digestion process.

The Matrix Spike Duplicate (EO-01-102325MSD) analysis met criteria for all compounds except for Antimony, Barium, Beryllium, Mercury, Selenium and Silver due to Chemical Interference during Digestion process.

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

The Calibration met the requirements.

The Serial Dilution (EO-01-102325L) met criteria for all compounds except for Calcium, Chromium, Magnesium, and Manganese due to unknown sample matrix interference.

E. Additional Comments:

Sample Q3447-01 and Q3447-03, Silver parameter is Oversaturated so, its Reported from its 5X Dilutions.

In analytical Sequence LB137662, The Result was outside acceptance Limit for Sodium of CCB05 but, no any samples parameter associated under this CCB.



In analytical Sequence LB137677, The Result was outside acceptance Limit for Iron of CCB10 but, no any samples parameter associated under this CCB.

In analytical Sequence LB137677, The Recovery was outside acceptance Limit for Sodium of CCV09 but, no any samples parameter associated under this CCV.

The Post Digest Spike (EO-01-102325A) analysis met criteria for all compounds except for Barium, Beryllium, Selenium, Silver and Vanadium due to unknown chemical interference of matrix with the addition of spike amount after digestion and before analysis; matrix has suppression effect during addition of spike.

Calculation for ICP-AES Soil Sample:

Conversion of Results from mg/L or ppm to mg/kg (Dry Weight Basis):

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

Where,

C = Instrument value in ppm (The average of all replicate exposures)

Vf = Final digestion volume (mL)

W = Initial aliquot amount (g) (Sample amount taken in prep)

S = % Solids / 100 (Fraction of Percent Solids)

DF = Dilution Factor

Calculation for Hg Soil Sample:

Conversion of Results from $\mu\text{g/L}$ or ppb to mg/kg :

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

Where,

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

Vf = Final prepared (absorbing solution) volume (mL)

W = Initial aliquot amount (g) (Fraction of Sample amount taken in prep)

S = % Solids / 100 (Fraction of Percent Solids)

DF = Dilution Factor

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 _____