



**284 Sheffield Street
Mountainside, NJ 07092**

SDG NARRATIVE

USEPA

SDG # MBHHA0

CASE # 51988

CONTRACT # 68HERH20D0011

SOW# SFAM01.1

LAB NAME: Alliance Technical Group, LLC

LAB CODE: ACE

LAB ORDER ID # Q1272

A. Number of Samples and Date of Receipt

03 Soil samples were delivered to the laboratory intact on 02/01/2025

B. Parameters

Test requested for Metals CLP FULL = Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc.

C. Cooler Temp

Indicator Bottle: Presence/Absence

Cooler: 1.2°C

D. Detail Documentation (related to Sample Handling Shipping, Analytical Problem, Temp of Cooler etc):

Issue 1: A "P" or "M" prefix was listed at the beginning of a CLP sample ID.

Issue 2: Laboratory QC is scheduled for ICP-AES and TCLP ICP-AES analysis, but no sample was designated for laboratory QC on the COC. The laboratory would like to use sample MBHHA2 for laboratory QC. The laboratory confirms that these samples are not blanks, rinsates, or PT.

E. Corrective Action taken for above:

Resolution 1: To maintain COC integrity, ASB requests no changes to the Sample IDs. The laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.

Resolution 2: Per SOW SFAM01.1 Exhibit A, Section 5.5.4.1., please note the issue in the SDG Narrative and proceed with the analysis of the samples.



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F. Analytical Techniques:

All analyses were based on CLP Methodology by method SFAM01.1.

Inter Element correction factors (IECs) are determined annually and correction factor are applied during ICP-AES analysis.

G. Calculation:

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)

V_f = Final digestion volume (mL)

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

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

DF = Dilution Factor

Example Calculation For Sample MBHHA0 For Arsenic:

If C = 0.1138834 ppm

V_f = 100 ml

W = 1.21g

S = 0.854 (85.4/100)

DF = 1

$$\text{Concentration (mg/kg)} = 0.1138834 \times \frac{100}{1.21 \times 0.854} \times 1$$

$$= 11.0209 \text{ mg/kg}$$

$$= 11 \text{ mg/kg (Reported Result with Signification)}$$

H. QA/ QC

Calibrations met requirements. Interference check met requirements. Blank analyses did not indicate any presence of contamination. Laboratory Control sample was within control limits. MS Spike sample did meet requirements except for Antimony, Silver, Thallium, Zinc. Duplicate sample did meet requirements.



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Serial Dilution did meet requirements except for Beryllium, Calcium, Iron, Magnesium, Manganese, Vanadium.

Chemical or physical interference effect was suspected and the data for all affected analytes in the sample received and associated with this serial dilution were flagged.

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. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Signature _____

Name: Nimisha Pandya

Date _____

Title: Document Control Officer