284 Sheffield Street
Mountainside, NJ 07092

SDG NARRATIVE

USEPA
SDG # GCQ18
CASE # 51925
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID # Q1046

A. Number of Samples and Date of Receipt

20 Soil samples were delivered to the laboratory intact on 01/09/2025.

B. Parameters

Test requested for Metals CLP12 = Arsenic, Barium, Cadmium, Chromium, Cobalt, Lead.

C. Cooler Temp

Indicator Bottle**: Presence/**Absence

Cooler: 5.4^{o}C

D. 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.

E. Calculation:

Calculation for ICP-AES Soil Sample:

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

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

Where,

C = Instrument value in ppm (The average of all replicate exposures)
Vf = Final digestion volume (mL)

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W = Initial aliquot amount (g) (Sample amount taken in prep)
S = % Solids / 100 (Fraction of Percent Solids)
DF = Dilution Factor

Example Calculation For Sample GCQ18 For Arsenic :

If C = 0.1230356 ppm
Vf = 100 ml
W = 1.17 g
S = 0.978 (97.8/100)
DF = 1

$$\text{Concentration (mg/kg)} = 0.1230356 \times \frac{100}{1.17 \times 0.978} \times 1$$

= 10.752416 mg/kg

= 11 mg/kg (Reported Result with Signification)

F. 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. Spike sample did meet requirements. Duplicate sample did meet requirements. Serial Dilution did meet requirements.

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