



**284 Sheffield Street
Mountainside, NJ 07092**

SDG NARRATIVE

USEPA

SDG # MC0DA8

CASE # 51863

CONTRACT # 68HERH20D0011

SOW# SFAM01.1

LAB NAME: Alliance Technical Group, LLC

LAB CODE: ACE

LAB ORDER ID # P4781

A. Number of Samples and Date of Receipt

01 Soil samples were delivered to the laboratory intact on 11/08/2024.

B. Parameters

Test requested for Metals CLP4= Lead

C. Cooler Temp

Indicator Bottle: Presence/Absence

Cooler: 1.9°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 has not been performed for SDG MC0D37 (TCLP ICP-AES 1-4 Metals with a 14-day TAT) and SDG MC0DA8 (ICP-AES 1-4 Metals with a 7-day TAT). The samples designated on the attached COC for Laboratory QC were already used for other SDGs. The laboratory would like to use samples MC0DA9 and MC0DA8 for QC analysis and has confirmed that these samples are not blanks, rinsates or PE samples.

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 Region 3, the laboratory should use samples MC0DA9 and MC0DA8 for QC analysis, 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)

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

Example Calculation For Sample MC0DA8 For Lead:

If C = 1.580647 ppm

Vf = 100 ml

W = 1.24 g

S = 0.856(85.6/100)

DF = 1

$$\begin{aligned} \text{Concentration (mg/kg)} &= 1.580647 \times \frac{100}{1.24 \times 0.856} \times 1 \\ &= 148.9153 \text{ mg/kg} \\ &= 150 \text{ mg/kg (Reported Result with Signification)} \end{aligned}$$

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



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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