

SDG NARRATIVE

USEPA
SDG # MJHJ00
CASE # 51682
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID # P4434

A. Number of Samples and Date of Receipt

11 Soil samples were delivered to the laboratory intact on 10/18/2024.

B. Parameters

Test requested for Metals CLP4 = Arsenic, Lead

C. Cooler Temp

Indicator Bottle: Presence/Absence

Cooler: 16.5°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: The laboratory received routine soil samples for ICP-AES analysis but there was not a sample designated for laboratory QC. The laboratory has selected sample MJHJ19 for laboratory QC and confirmed that it is not a PE, blank, or rinsate sample.

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 SFAM01.1 Exhibit A, Section 5.5.4.1., the laboratory will note the issue in the SDG Narrative and proceed with analysis of the samples.



284 Sheffield Street Mountainside, NJ 07092

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):

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)

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

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

DF = Dilution Factor

Example Calculation For Sample MJHJ00 For Arsenic:

$$\begin{array}{ll} If \ C &= ppm \\ Vf = 100 \ ml \\ W &= 1.25g \\ S &= 0.965(96.5/100) \\ DF = 1 \end{array}$$

Concentration (mg/kg) =
$$0.0411466 \text{ x} \frac{100 \text{ x}}{1.25 \text{ x}} \frac{1}{0.965}$$
 = 3.4111 mg/kg

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 except for Lead. Duplicate sample did meet requirements except for Lead. Serial Dilution did meet requirements.

= 3.4 mg/kg (Reported Result with Signification)



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