284 Sheffield Street
Mountainside, NJ 07092

SDG NARRATIVE

USEPA
SDG # ME2947
CASE # 51900
CONTRACT # 68HERH20D0011
SOW# SFAM01.1
LAB NAME: Alliance Technical Group, LLC
LAB CODE: ACE
LAB ORDER ID # Q1164

A. Number of Samples and Date of Receipt

02 Soil sample were delivered to the laboratory intact on 01/22/2025.

B. Parameters

Test requested for TCLP ICP Metals = Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver, TCLP Mercury.

C. Cooler Temp

Indicator Bottle**: Presence/**Absence

Cooler: 2.1^{o}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 samples for Case 51847 are scheduled with a 21-day TAT, but the COC lists a 14-day TAT.

Issue 3: TCLP analyses are listed on the COC but are not scheduled for Case 51847.

Issue 4: SDGs E2946, E2947, ME2946 and ME2947 require Laboratory QC for soil samples, but a sample was not designated on the COC. The laboratory selected samples E2947 and ME2947 for Laboratory QC for ARO, PEST, TCLP VOA, TCLP SVOA, ICP-MS, ICP-AES, Hg, TCLP ICP-AES, TCLP Hg analysis. The laboratory confirmed these samples are not blank, rinsate or PT 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.

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Resolution 2: Per Region 5, the correct Case number is 51900. Please note the issue in the SDG Narrative and proceed with the analysis of the samples.

Resolution 3: Per Region 5, the correct Case number is 51900. Please note the issue in the SDG Narrative and proceed with the analysis of the samples.

Resolution 4: Per SOW, SFAM01.1 Exhibit A, Section 5.5.4.1, the laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.

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 Water Sample:

$$\text{Concentration or Result } (\mu g/L) = C \times \frac{Vf}{Vi} \times DF \times 1000$$

Where,

C = Instrument value in ppm (The average of all replicate exposures)
Vf = Final digestion volume (mL)
Vi = Initial aliquot amount (mL) (Sample amount taken in prep)
DF = Dilution Factor

Example Calculation For Sample ME2946 For Arsenic:

If C = 0.0037419 ppm
Vf = 50 ml
Vi = 50 ml
DF = 1

$$\text{Concentration or Result } (\mu g/L) = 0.0037419 \times \frac{50}{50} \times 1 \times 1000$$

$$= 3.7419\ \mu g/L$$

$$= 3.7\ \mu g/L \text{ (Reported Result with Signification)}$$

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Calculation for Hg Water Sample:

Concentration or Result (µg/L) = C x DF
Where,
C = Instrument response in µg/L from the calibration curve.
DF = Dilution Factor

Example Calculation For Mercury:

If C = 0.1811 ppb
DF = 1

Concentration or Result (µg/L) = 0.1811 x 1
= 0.1811 µg/L
= 0.18 µg/L (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. 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