



**284 Sheffield Street
Mountainside, NJ 07092**

SDG NARRATIVE

USEPA

SDG # MJNLA3

CASE # 51956

CONTRACT # 68HERH20D0011

SOW# SFAM01.1

LAB NAME: Alliance Technical Group, LLC

LAB CODE: ACE

LAB ORDER ID # Q1129

A. Number of Samples and Date of Receipt

01 Soil sample was delivered to the laboratory intact on 01/17/2024.

B. Parameters

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

C. Cooler Temp

Indicator Bottle: Presence/Absence

Cooler: 3.0°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 has received two SDGs without samples designated for laboratory QC for ICP-AES, Hg, and TCLP ICP-AES. The laboratory has selected samples MJNLE5 and MJNLA3 for laboratory QC and confirms that these are not blanks, rinsates, or PT samples.

Issue 3: The COC indicates that these samples are for Case 51821, but this Case completed on 12/20/2024.

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 the analysis of the samples.



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Resolution 3: Per Region 10, the COC references the incorrect Case number and samples in this shipment are for Case 51956. A corrected COC will be provided once it is available. Please note the issue in the SDG Narrative and proceed with 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:

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

Where,

C = Instrument value in ppm (The average of all replicate exposures)

V_f = Final digestion volume (mL)

V_i = Initial aliquot amount (mL) (Sample amount taken in prep)

DF = Dilution Factor

Example Calculation For Sample MJNLA3 For Arsenic:

If C = 0.1513800 ppm

V_f = 50 ml

V_i = 50 ml

DF = 1

$$\text{Concentration or Result } (\mu\text{g/L}) = 0.1513800 \times \frac{50}{50} \times 1 \times 1000$$

$$= 151.38 \mu\text{g/L}$$

$$= 150 \mu\text{g/L (Reported Result with Signification)}$$

Calculation for Hg Water Sample:

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

Where,

C = Instrument response in $\mu\text{g/L}$ from the calibration curve.

DF = Dilution Factor



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Example Calculation For Mercury:

$$\begin{aligned} \text{If } C &= 0.1811 \text{ ppb} \\ \text{DF} &= 1 \end{aligned}$$

$$\begin{aligned} \text{Concentration or Result } (\mu\text{g/L}) &= 0.1811 \times 1 \\ &= 0.1811 \mu\text{g/L} \\ &= 0.18 \mu\text{g/L (Reported Result with Signification)} \end{aligned}$$

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.

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