

CHEMTECH

**Alliance Technical Group LLC
284 Sheffield Street
Mountainside, NJ 07092**

SDG NARRATIVE

USEPA

SDG # MYD5C5

CASE # 51495

CONTRACT # 68HERH20D0011

SOW# SFAM01.1

LAB NAME: Alliance Technical Group, LLC

LAB CODE: ACE

CHEMTECH PROJECT #P2831

MODIFIED ANALYSIS#3208.0

A. Number of Samples and Date of Receipt

01 Soil samples were delivered to the laboratory intact on 06/10/2024.

B. Parameters

Test requested for Metals CLP Full = Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Manganese, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium & Zinc.

C. Cooler Temp

Indicator Bottle: Presence/**Absence**

Cooler: 23.2°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 samples without ice. The coolers had temperatures 24.2 degrees C, 23.2 degrees C, 23.8 degrees C, 24.1 degrees C, and 26.1 degrees C upon arrival. The laboratory would like to know how to proceed.

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.

CHEMTECH

Alliance Technical Group LLC

284 Sheffield Street

Mountainside, NJ 07092

Resolution 2: Per Region 9, Case 51495 is for metals. There are no rinsates in those cooler so they don't require ice. The laboratory should 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 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 MYD5C5 For Arsenic:

If C = 1.349942 ppm

Vf = 100 ml

W = 1.33g

S = 0.988(98.8/100)

DF = 1

$$\text{Concentration (mg/kg)} = 1.349942 \times \frac{100}{1.33 \times 0.988} \times 1$$

$$= 102.73218 \text{ mg/kg}$$

$$= 100 \text{ mg/kg (Reported Result with Signification)}$$

H. QA/ QC

CHEMTECH

Alliance Technical Group LLC

284 Sheffield Street

Mountainside, NJ 07092

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 Antimony, Copper, Lead, Selenium, Silver and Thallium. 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