



**284 Sheffield Street  
Mountainside, NJ 07092**

## **SDG NARRATIVE**

**USEPA**

**SDG # YE8G5**

**CASE # 51955**

**CONTRACT # 68HERH20D0011**

**SOW# SFAM01.1**

**LAB NAME: Alliance Technical Group, LLC**

**LAB CODE: ACE**

**LAB ORDER ID #Q1106**

### **A. Number of Samples and Date of Receipt**

18 Soil samples were delivered to the laboratory intact on 01/16/2025, 01/18/2025.

### **B. Parameters**

Test requested for SPLP MetalGroup3 = Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc & SPLP Mercury.

### **C. Cooler Temp**

Indicator Bottle: Presence/Absence

Cooler: 2.1°C, 2.0°C, 1.9°C, 2.5°C, 1.8°C, 2.1°C

### **D. 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.

### **E. Calculation:**

#### **Calculation for ICP-AES Water Sample:**

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



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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 YE8G3 For Barium:**

If C = 2.107845 ppm

Vf = 50 ml

Vi = 50 ml

DF = 1

$$\text{Concentration or Result } (\mu\text{g/L}) = 2.107845 \times \frac{50}{50} \times 1 \times 1000$$

$$= 2107.845 \mu\text{g/L}$$

$$= 2100 \mu\text{g/L} \text{ (Reported Result with Signification)}$$

**Calculation for Hg Water Sample:**

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

Where,

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

DF = Dilution Factor

**Example Calculation For Sample YE8H0:**

If C = 0.0421 ppb

DF = 1

$$\text{Concentration or Result } (\mu\text{g/L}) = 0.0421 \times 1$$

$$= 0.042 \mu\text{g/L}$$

$$= 0.042 \mu\text{g/L} \text{ (Reported Result with Signification)}$$

**F. 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 Aluminum, Manganese. Duplicate sample did meet requirements Calcium. Serial Dilution did meet requirements except for Barium, Calcium.



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Chemical or physical interference effect was suspected and the data for all affected analytes in the sample received and associated with this serial dilution were flagged.

Samples receive as soil but as per ASR process for SPLP and forms are reported with water.

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