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# **CASE NARRATIVE**

**AECOM** 

Project Name: AE1-CTY 3.2.Z-PR-DOCK-Des-ODC - 60693795-1719206

Project # N/A Order ID # Q3419

**Test Name: Mercury, Metals ICP-TAL** 

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

5 Solid samples were received on 10/21/2025.

#### **B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Mercury, Metals ICP-TAL. This data package contains results for Mercury, Metals ICP-TAL.

## C. Analytical Techniques:

The analysis of Metals ICP-TAL was based on method 6020B, digestion based on method 3050 (soils). The analysis and digestion of Mercury was based on method 7471B.

## D. QA/ QC Samples:

The Holding Times were met for all analysis.

Sample PR-132-S16-015094-20251021 was diluted due to high concentrations for Chromium and Mercury & Sample PR132-S16-119133-20251021 was diluted due to high concentrations for Aluminum, Chromium, Iron, Lead and Mercury & Sample PR132-S16-094119-20251021 was diluted due to high concentrations for Chromium,Iron and Mercury.

The Blank Spike met requirements for all compounds.

The Duplicate (PR-132-S16-015094-20251021DUP) analysis met criteria for all compounds except for Mercury due to sample matrix interference.

The Matrix Spike (PR-132-S16-015094-20251021MS) analysis met criteria for all compounds except for Calcium, Chromium, Manganese, Potassium, and Silver due to soil matrix highly contaminated with unknown interferences during digestion, possible due to some black brownish particles in the sample which are not consistent in every digested vial due to inconsistent homogeneity of the matrix.

The Matrix Spike Duplicate (PR-132-S16-015094-20251021MSD) analysis met criteria for all compounds except for Calcium, Chromium, Copper, Magnesium, Manganese, Nickel, Potassium, Silver, Sodium, Vanadium and Zinc due to soil matrix highly contaminated with unknown interferences during digestion, possible due to some black brownish particles in the sample which are not consistent in every digested vial due to inconsistent homogeneity of the matrix.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

The Serial Dilution met criteria for all compounds.



#### **E. Additional Comments:**

The Post Digest Spike (PR-132-S16-015094-20251021) analysis met criteria for all compounds except for Calcium, Chromium, Manganese, Nickel, Potassium, Silver, Vanadium and Zinc due to unknown chemical interference of matrix with the addition of spike amount after digestion and before analysis; matrix has suppression effect during addition of spike.

Collision cell is being used to remove potential interferences. The analytes Na, Mg, Al, K, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As are being analyzed with collision cell and analytes Be, B, Ca, Ti, Se, Sr, Zr, Mo, Ag, Cd, Sn, Sb, Ba, Tl, Pb, U are being analyzed with Non-Collision Cell. Helium gas is used for the Collision Cell analysis.

Internal standard 89Y(1 and 2) was out Side qc limit for samples Q3419-01, Q3419-02MS, Q3419-03MSD, Q3419-04 and Q3419-05 in Original so for these samples affected parameters are reported from 5X Dilution.

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. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature		
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