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CASE NARRATIVE

Portal Partners Tri-Venture

Project Name: Amtrak Sawtooth Bridges 2025

Project # N/A

Order ID # Q2198

Test Name: Mercury, Metals ICP-TAL

A. Number of Samples and Date of Receipt:

4 Solid samples were received on 06/03/2025.

1 Water sample was received on 06/03/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Corrosivity, EPH, EPH, Flash Point, Hexavalent Chromium, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, pH, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP FULL, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL, TPH GC, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for Mercury, Metals ICP-TAL.

C. Analytical Techniques:

The analysis of Metals ICP-TAL was based on method 6010D, digestion based on method 3050 (soils) and 3010 (waters). The analysis and digestion of Mercury was based on method 7470A. The analysis and digestion of Mercury was based on method 7471B.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate (OK-01-060325DUP) analysis met criteria for all samples except for Cadmium and Sodium due to sample matrix interference. The Duplicate (OK-01-060325MSD) analysis met criteria for all samples except for Potassium due to Chemical Interference during Digestion Process.

The Matrix Spike (B-202-GW01MS) analysis met criteria for all elements except for Antimony and Manganese due to Chemical Interference during Digestion process. The Matrix Spike (OK-01-060325MS) analysis met criteria for all elements except for Antimony, Barium, Beryllium, Potassium, Sodium and Zinc due to Chemical Interference during Digestion Process and for Mercury due to sample matrix interference.

The Matrix Spike Duplicate (B-202-GW01MSD) analysis met criteria for all elements except for Antimony and Manganese due to Chemical Interference during Digestion Process. The Matrix Spike Duplicate (OK-01-060325MSD) analysis met criteria for all elements except for Antimony, Barium, Beryllium, Chromium, Copper, Potassium, Silver and Sodium due to Chemical Interference during Digestion process.



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

The Calibration met the requirements.

The Serial Dilution (OK-01-060325L) met criteria for all samples except for Calcium, Chromium, Copper, and Manganese due to sample matrix interference.

E. Additional Comments:

The Post Digest Spike (Ok-01-060325A) analysis met criteria for all elements except for Barium, Chromium, Copper, Potassium and Sodium 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.

The Post Digest Spike (B-202-GW01A) analysis met criteria for all elements except for Antimony and Manganese 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.

Sample Q2198-05 and its QC's analyzed straight 5X Dilution due to sample matrix very highly contaminated and viscos matrix which can cause sample transporting to the sample introduction and to the torch

In analytical sequence LB136011, The % recovery was outside of acceptance limit for Iron, Potassium and Sodium of CCV08 but, no any sample associated under this CCV.

In analytical sequence LB136052, The % recovery was outside of acceptance limit for Arsenic, Iron, Potassium, Selenium, Sodium, Thallium, and Zinc of CCV06 and for Arsenic and Selenium of CCV07 but, no any samples associated under these CCVs.

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_____