



# CASE NARRATIVE

Weston Solutions, Inc. Project Name: RFP 905

Project # N/A

**Chemtech Project # Q1421** 

**Test Name: EPH** 

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

10 Solid samples were received on 02/24/2025.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH, Mercury, Metals ICP-TAL, METALS TAL+CN, PCB, Pesticide-TCL, SPLP BNA, SPLP Cyanide, SPLP Extraction, SPLP ICP Metals, SPLP Mercury, SPLP PCB, SPLP Pesticide, SPLP VOA, SPLP ZHE Ext, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for EPH.

### C. Analytical Techniques:

The analysis were performed on instrument FID\_C. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224. The analyses were performed on instrument FID\_D. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224. The analysis of EPHs was based on method NJEPH and extraction was done based on method 3541.

### D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS {Q1421-02} with File ID: FD049142.D recoveries met the requirements for all compounds except for Aromatic C21-C36[151%] due to matrix interference.

The MSD {Q1421-03} with File ID: FD049143.D recoveries met the acceptable requirements except for Aromatic C21-C36[146%] due to matrix interference.

The RPD met criteria.

The Blank Spike met requirements for all samples.

The Blank Spike Duplicate met requirements for all samples.

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

The Initial Calibration met the requirements.

The Continuous Calibration met the requirements .



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

The soil samples results are based on a dry weight basis.

## F. Calculation for Concentration in Water Samples:

$$C (ug/L) = \underbrace{(A) (D) (Ve)}_{CF (Vs)}$$

#### Where:

C = Concentration of each compound or hydrocarbon range, ug/L

A = Area response of each compound or carbon range to be measured

D = Dilution Factor

Vs = Volume of sample extracted, mL

Ve = Final volume of extract, uL

CF = Calibration factor of each compound or carbon range for each fraction

# G. Calculation for Concentration in Soil Samples:

$$C (ug/g) = \underline{(A) (D) (Ve)}$$

$$CF (S)$$

#### Where:

C = Concentration of each compound or hydrocarbon range, ug/g (dry weight basis)

A = Area response of each compound or carbon range to be measured

D = Dilution Factor

Ve = Final volume of extract, uL

CF = Calibration factor of each compound or carbon range for each fraction

S = Dry sample weight, mg

Total EPH concentration = Total of 4 Aromatic Carbon Ranges and 4 Aliphatic Carbon Ranges.

### **H. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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			
~ -5	 	 	