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CASE NARRATIVE

Weston Solutions

Project Name: Fort Meade MD Tipton Airfield Parcel RI - 0111169

Project # N/A

Chemtech Project # Q1569

Test Name: PCB

A. Number of Samples and Date of Receipt:

4 Solid samples were received on 03/14/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Cyanide, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, pH, Sulfide, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP METALS, TCLP Pesticide, TCLP VOA and TCLP ZHE Extraction. This data package contains results for PCB.

C. Analytical Techniques:

The analyses were performed on instrument GCECD_P. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 µm; Catalogue # 7HM-G017-11. The analysis of PCBs was based on method 8082A 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 except for C0018MS [Decachlorobiphenyl(2) - 170%], C0018MSD [Decachlorobiphenyl(2) - 166%] Surrogate failing for MS-MSD but it is passing for Original sample therefore no corrective action taken.

The Retention Times were acceptable for all samples.

The MS recoveries for {Q1572-06MS} with File ID: PP070564.D met requirements for all samples except for AR1016[7313%] and AR1260[169%] due to sample matrix interference.

The MSD {Q1572-06MSD} with File ID: PP070565.D recoveries met requirements for all samples except for AR1016[7777%] and AR1260[215%] due to sample matrix interference.

The RPD for {Q1572-06MSD} with File ID: PP070565.D met criteria except for AR1260[24%] due to difference in results of MS-MSD.

The Blank Spike 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 not QT review data is reported in the Miscellaneous.
The soil samples results are based on a dry weight basis.

F. Calculation for Concentration in Soil samples:

$$\text{Concentration ug/Kg (Dry weight basis)} = \frac{(A_x) (V_t) (D_F) (G_P C)}{(C_F) (V_i) (W_s) (D)}$$

Where,

A_x = Response (peak area or height) of the compound to be measured.

C_F = Mean Calibration Factor from the initial calibration (area/ng).

V_t = Volume of the concentrated extract in uL

V_i = Volume of extract injected (uL). (If a single injection is made on to two columns, use ½ the volume in the syringe as the volume injected onto each column).

W_s = Weight of sample extracted (g).

D = $\frac{\% \text{ dry weight or } 100 - \% \text{ Moisture}}{100}$

GPC = $\frac{V_{in}}{V_{out}}$ = GPC factor (If no GPC is performed, GPC=1)

V_{in} = Volume of extract loaded onto GPC column.

V_{out} = Volume of extract collected after GPC cleanup.

D_F = Dilution Factor

G. 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 _____