

CASE NARRATIVE

Weston Solutions, Inc.

Project Name: RFP 916

Project # N/A

Order ID # Q3178

Test Name: Pesticide-TCL

A. Number of Samples and Date of Receipt:

3 Solid samples were received on 09/23/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Pesticide-TCL. This data package contains results for Pesticide-TCL.

C. Analytical Techniques:

The analysis was performed on instrument ECD_D. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df.; Catalog # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 7HMG017- 11. The analysis was performed on instrument ECD_L. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df.; Catalog # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 7HMG017- 11. The analysis of Pesticide-TCLs was based on method 8081B and extraction was done based on method 3541.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries were met for all analysis except for EME-TS14-01MS [Decachlorobiphenyl(1)13%, Decachlorobiphenyl(2)15%] but original sample and MSD passing for surrogate therefore no corrective action taken.

The Retention Times were met for all analysis.

The MS {Q3178-02MS} with File ID: PL097444.D recoveries met the requirements for all compounds except for [4,4-DDE(1)52% - 4,4-DDE(2)49%], [4,4-DDT(1)44% - 4,4-DDT(2)31%], [Aldrin(1)48% - Aldrin(2)51%], [alpha-BHC(1)55% - alpha-BHC(2)57%], [Endosulfan I(1)54% - Endosulfan I(2)45%], [Endosulfan sulfate(1)45% - Endosulfan sulfate(2)33%], [Endrin aldehyde(1)27% - Endrin aldehyde(2)20%], [Endrin ketone(1)52% - Endrin ketone(2)36%], [Endrin(1)50% - Endrin(2)45%], [gamma-BHC (Lindane)(1)41% - gamma-BHC (Lindane)(2)43%], [Heptachlor(1)39% - Heptachlor(2)40%], [Methoxychlor(1)41% - Methoxychlor(2)30%] due to matrix interference.

The MSD {Q3178-03MSD} with File ID: PL097445.D recoveries met the requirements for all compounds except for [4,4-DDT(1)50% - 4,4-DDT(2)40%], [Endosulfan sulfate(1)54% - Endosulfan sulfate(2)45%], [Endrin aldehyde(1)27% - Endrin aldehyde(2)20%], [gamma-BHC (Lindane)(1)18% - gamma-BHC (Lindane)(2)17%], [Heptachlor(1)28% - Heptachlor(2)27%], [Methoxychlor(1)46% - Methoxychlor(2)41%] and due to matrix interference.

The RPD for {Q3178-03MSD} with File ID: PL097445.D met criteria except for 4,4-DDD[31%], 4,4-DDE[27%], Aldrin[27%], alpha-BHC[24%], alpha-Chlordane[23%], beta-BHC[21%], delta-BHC[29%], Dieldrin[26%], Endosulfan II[21%], Endrin ketone[21%], Endrin[23%], gamma-BHC (Lindane)[78%], Heptachlor epoxide[23%] and Heptachlor[33%] due to difference in results of MS and MSD.

The Blank Spike met requirements for all compounds.

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

The Initial Calibration met the requirements.

The Continuous Calibration File ID PL097449.D met the requirements except for Endrin is failing in 2nd column but passing in first column therefore no corrective action taken.

E. Additional Comments:

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

F. Calculation for Concentration in Soil samples:

$$\text{Concentration ug/Kg (Dry weight basis)} = \frac{(A_x) (V_t) (DF) (GPC)}{(CF) (V_i) (W_s) (D)}$$

Where,

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

CF = 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 onto 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.

DF = Dilution Factor



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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_____