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## **CASE NARRATIVE**

**Weston Solutions, Inc.**

**Project Name: RFP 792**

**Project # N/A**

**Chemtech Project # N2877**

**Test Name: Pesticide-TCL**

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

24 Solid samples were received on 05/14/2022.

### **B. Parameters**

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

### **C. Analytical Techniques:**

The analysis was performed on instrument ECD\_L. The front column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 7HMG017- 11 The rear column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0. 5 um df,,: Catalog # 7HM-G016-17. .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 met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS recoveries for {N2875-01MS} with File ID: PL074952.D met requirements for all samples except for 4,4-DDT[198%] and Endrin aldehyde[164%] due to having bad and dirty matrix.

The MSD {N2875-01MSD} with File ID: PL074953.D recoveries met requirements for all samples except for 4,4-DDT[203%] and Endrin aldehyde[161%] due to having bad and dirty matrix.

The RPD met criteria.

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 File ID PL074961.D met the requirements except for 4,4-DDT is failing in 2nd column. Associated samples have not any positive hit of this compound.

The Continuous Calibration File ID PL074980.D met the requirements except for gamma-Chlordane, Methoxychlor is failing in 1st column AND 4,4-DDD,4,4-DDE,4,4-DDT,Decachlorobiphenyl,Endosulfan Sulfate, Endrin ketone, Endrin, Heptachlor, Methoxychlor is failing in 2nd column. Associated samples with these CCC without positive detection of these compounds.

Samples P007-SS015-0006-01, P007-SS016-0006-01 and P007-SS017-0006-01 were diluted due to bad matrices.

**E. Additional Comments:**

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

Samples P007-SS015-0006-01, P007-SS016-0006-01 and P007-SS017-0006-01 directly analyze with 10X due to having bad and dirty matrix.

**F. Calculation for the Concentration in Soil Samples**

$$\text{Concentration ug/Kg (Dry weight basis)} = \frac{(Ax) (Vt) (DF) (GPC)}{(CF) (Vi) (Ws) (D)}$$

Where,

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

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

Vt = Volume of the concentrated extract in uL

Vi = 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).

Ws = Weight of sample extracted (g).

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

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

DF = 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.

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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\_\_\_\_\_