



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

## **CASE NARRATIVE**

**Weston Solutions, Inc.**

**Project Name: RFP 792**

**Project # N/A**

**Chemtech Project # N2877**

**Test Name: PCB**

### **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 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 analyses were performed on instrument GCECD\_O. 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

P007-SS013-1824-01MS [Decachlorobiphenyl(1) - 177%],

P007-SS013-1824-01MSD [Decachlorobiphenyl(1) - 180%],

P007-SS016-0612-01DL [Decachlorobiphenyl(1) - 0%, Decachlorobiphenyl(2) - 0%,

Tetrachloro-m-xylene(1) - 0% and Tetrachloro-m-xylene(2) - 0%].

The Retention Times were acceptable for all samples except for P007-SS016-0612-01DL.

The MS recoveries met the requirements for all compounds.

The MSD recoveries met the acceptable requirements.

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 met the requirements.

Samples P007-SS015-0006-01, P007-SS016-0612-01 were diluted due to high concentrations.



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**E. Additional Comments:**

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

Sample P007-SS014-2430-01 has F flag for AR1260#04 in first column due to unknown matrix interference. However 2nd column is within RT window for PCB detection.

**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<sub>x</sub> = Response (peak area or height) of the compound to be measured.

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

V<sub>t</sub> = Volume of the concentrated extract in uL

V<sub>i</sub> = 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<sub>s</sub> = 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

**F. 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\_\_\_\_\_