

CASE NARRATIVE

Weston Solutions, Inc.

Project Name: RFP 911

Project # N/A

Chemtech Project # Q1860

Test Name: PCB

A. Number of Samples and Date of Receipt:

42 Solid samples were received on 04/23/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: PCB. 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

P001-SS007-01 [Decachlorobiphenyl(2) - 215%],

P001-SS007-01DL [Decachlorobiphenyl(1) - 178%],

P001-SS013-01DL [Decachlorobiphenyl(2) - 194%],

P001-SS021-01DL [Decachlorobiphenyl(2) - 192%] as per method one surrogate is allowed to failed, therefore no corrective action was taken and

P001-SS009-01 [Decachlorobiphenyl(1) - 248%, Decachlorobiphenyl(2) - 227%],

P001-SS012-01 [Decachlorobiphenyl(1) - 219%, Decachlorobiphenyl(2) - 202%],

P001-SS012-01DL [Decachlorobiphenyl(1) - 219%, Decachlorobiphenyl(2) - 238%],

P001-SS021-01 [Decachlorobiphenyl(1) - 187%, Decachlorobiphenyl(2) - 193%],

P001-SS025-01 [Decachlorobiphenyl(1) - 250%, Decachlorobiphenyl(2) - 222%],

P001-SS026-01 [Decachlorobiphenyl(1) - 373%, Decachlorobiphenyl(2) - 332%],

P001-SS028-01 [Decachlorobiphenyl(1) - 423%, Decachlorobiphenyl(2) - 358%],

P001-SS035-01 [Decachlorobiphenyl(1) - 179%, Decachlorobiphenyl(2) - 181%],

P001-SS025-01DL [Decachlorobiphenyl(1) - 225%, Decachlorobiphenyl(2) - 240%],

P001-SS026-01DL [Decachlorobiphenyl(1) - 380%, Decachlorobiphenyl(2) - 418%],

P001-SS033-01DL [Decachlorobiphenyl(1) - 181%, Decachlorobiphenyl(2) - 180%],

P001-SS034-01DL [Decachlorobiphenyl(1) - 188%, Decachlorobiphenyl(2) - 254%],
P001-SS035-01DL [Decachlorobiphenyl(1) - 196%, Decachlorobiphenyl(2) - 229%],
P001-SS031-01DL [Decachlorobiphenyl(1) - 247%, Decachlorobiphenyl(2) - 283%],
P001-SS028-01DL [Decachlorobiphenyl(1) - 415%, Decachlorobiphenyl(2) - 434%],
P001-SS008-01 [Decachlorobiphenyl(1) - 204%, Decachlorobiphenyl(2) - 407%,
Tetrachloro-m-xylene(1) - 184%],
P001-SS029-01 [Tetrachloro-m-xylene(1) - 149%, Tetrachloro-m-xylene(2) - 151%],
but these samples were required further dilution as well due to high concentration,
therefore original and Dilution analysis were reported and no further corrective action
taken also

P001-SS009-01DL [Decachlorobiphenyl(1) - 0%, Decachlorobiphenyl(2) - 0%,
Tetrachloro-m-xylene(1) - 0%, Tetrachloro-m-xylene(2) - 0%],
P001-SS032-01DL2 [Decachlorobiphenyl(1) - 0%, Decachlorobiphenyl(2) - 0%,
Tetrachloro-m-xylene(1) - 0%, Tetrachloro-m-xylene(2) - 0%],
P001-SS035-01DL2 [Decachlorobiphenyl(1) - 0%, Decachlorobiphenyl(2) - 0%,
Tetrachloro-m-xylene(1) - 0% and Tetrachloro-m-xylene(2) - 0%],
P001-SS031-01DL2 [Decachlorobiphenyl(1) - 0%, Decachlorobiphenyl(2) - 0%,
Tetrachloro-m-xylene(1) - 0%, Tetrachloro-m-xylene(2) - 0%],
P001-SS008-01DL [Decachlorobiphenyl(1) - 0%, Decachlorobiphenyl(2) - 0%,
Tetrachloro-m-xylene(1) - 0%, Tetrachloro-m-xylene(2) - 0%],
These samples having surrogate failure due to bad matrix and samples required
dilution, so dilution run was performed and in dilution
run also surrogates are failed. no further action required .

The Retention Times were acceptable for all samples.

The MS {Q1860-20MS} with File ID: PO110728.D recoveries met the requirements for
all compounds except for AR1016[649%], AR1260[316%] due to matrix interference.

The MSD {Q1860-21MSD} with File ID: PO110729.D recoveries met the acceptable
requirements except for AR1016[698%], AR1260[321%] due to matrix interference.

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 PO110750.D met the requirements except for
Aroclor-1016(Peak-02),Tetrachloro-m-xylene is failing in 1st column but passing but
passing in 2nd column therefore no corrective action taken.

The Continuous Calibration File ID PO110783.D met the requirements except for
Tetrachloro-m-xylene is failing in 1st column but passing but passing in 2nd column
therefore no corrective action taken.

Samples P001-SS006-01, P001-SS007-01, P001-SS008-01, P001-SS009-01, P001-SS012-01, P001-SS013-01, P001-SS016-01, P001-SS017-01, P001-SS017-02, P001-SS019-01, P001-SS020-01, P001-SS021-01, P001-SS023-01, P001-SS025-01, P001-SS026-01, P001-SS028-01, P001-SS029-01, P001-SS030-01, P001-SS031-01, P001-SS031-01DL, P001-SS032-01, P001-SS032-01DL, P001-SS033-01, P001-SS034-01, P001-SS035-01 and P001-SS035-01DL were diluted due to high concentrations.

E. Additional Comments:

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

F. Calculation for Concentration in Soil samples:

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

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.

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_____