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CASE NARRATIVE

Weston Solutions, Inc.
Project Name: RFP 905
Project # N/A
Chemtech Project # Q1664
Test Name: SVOC-TCL BNA -20

A. Number of Samples and Date of Receipt:
22 Solid samples were received on 03/27/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH, Mercury, Metals ICP-TAL, METALS TAL+CN, PCB, Pesticide-TCL, SPLP BNA, SPLP Cyanide, SPLP Extraction, SPLP ICP Metals, SPLP Mercury, SPLP PCB, SPLP Pesticide, SPLP VOA, SPLP ZHE Ext, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for SVOC-TCL BNA -20.

C. Analytical Techniques:
The samples were analyzed on instrument BNA_F using GC Column DB-UI 8270D which is 20 meters, 0.18 mm ID, 0.36 um df The samples were analyzed on instrument BNA_M using GC Column ZB-Semi Volatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe analysis of SVOC-TCL BNA -20 was based on method 8270E 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 PB167369BS [Terphenyl-d14 - 112%], marginally out of QC limits, therefore no corrective action was taken.
The Internal Standards Areas met the acceptable requirements except for P001-BBDGA-001-02, P001-BBDGA-002-01, P001-BBDGA-005-01 and P001-BBDGA-006-01, The sample was reanalyzed to confirm internal standard failure, both run were reported in Hard Copy.

The Retention Times were acceptable for all samples.

The MS {Q1664-02MS} with File ID: BM049797.D recoveries met the requirements for all compounds except for 2,2-oxybis(1-Chloropropane)[111%], 2-Chlorophenol[111%], 3+4-Methylphenols[117%], Atrazine[172%] and Benzaldehyde[111%], due to matrix interference therefore no corrective action is required .

The MSD {Q1664-03MSD} with File ID: BM049798.D recoveries met the acceptable requirements except for 2,2-oxybis(1-Chloropropane)[117%], 2,3,4,6-Tetrachlorophenol[117%], 2-Chlorophenol[111%], 3+4-Methylphenols[122%], 4-

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Chlorophenyl-phenylether[111%], Atrazine[178%] and Benzaldehyde[117%], due to matrix interference, therefore no corrective action is required.

The RPD for {Q1664-03MSD} with File ID: BM049798.D met criteria except for 4-Chloroaniline[22%],due to matrix interference, no corrective action was taken.

The Blank Spike for {PB167369BS} with File ID: BF142177.D met requirements for all samples except for 2,4,5-Trichlorophenol[106%], 2,4-Dinitrotoluene[112%], 2,6-Dinitrotoluene[106%], 2-Chloronaphthalene[100%], 3,3-Dichlorobenzidine[19%], 4,6-Dinitro-2-methylphenol[118%], 4-Chlorophenyl-phenylether[106%], Acenaphthylene [106%], Anthracene[106%], Benzo(a)anthracene[106%], Benzo(a)pyrene[112%], Carbazole[100%], Chrysene[106%], Dimethylphthalate[100%], Hexachlorobenzene [106%], Hexachlorobutadiene[106%], Hexachlorocyclopentadiene [185%], Isophorone [100%], N-Nitrosodiphenylamine[100%], Pentachlorophenol[106%] and Pyrene[106%], The associate samples have no positive hit for these compounds therefore no corrective action was taken.

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

The % RSD is greater than 20% in the Initial Calibration (8270-BF031025.M) for 2,4-Dinitrophenol, this compound is passing on Linear Regression.

The % RSD is greater than 20% in the Initial Calibration (8270-BM031325.M) for 4-Nitroaniline, this compound is passing on Linear Regression, and 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol passing on Quadratic regression.

The Continuous Calibration File ID BF142175.D met the requirements except for Benzaldehyde, The associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Continuous Calibration File ID BM049784.D met the requirements except for Terphenyl-d14, The associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Tuning criteria met requirements.

E. Additional Comments:

Concentration of SOIL Sample:

Concentration ug/Kg,

$$\text{(dry weight basis)} = \frac{(Ax)\,(Is)\,(Vt)\,(DF)\,(GPC)}{(Ais)\,(\overline{RRF})\,(Vi)\,(Wt)\,(D)}$$

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Where,
Ax = Area of the characteristic ion for the compound to be measured.
Ais = Area of the characteristic ion for the internal standard.
Is = Amount of internal standard injected in ng.
Vi = Volume of extract injected in microliters (uL)
Vt = Volume of concentrated extract in microliters (uL)
Wt = Weight of the original sample extracted in g
Df = Dilution factor

$\overline{\text{RRF}}$ = Mean Relative Response Factor determined from the initial calibration standard.
GPC = Vin = GPC factor (If no GPC is performed, GPC=1)
Vout = Volume of extract collected after GPC cleanup.

The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.

F. 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_____