

# **Cover Page**

- **Order ID :** P4620
- Project ID : RFP 872
  - Client : Weston Solutions, Inc.

#### Lab Sample Number **Client Sample Number** P4620-01 P001-CF06-01 P4620-02 P001-CF06-01 P4620-03 P001-CF07-01 P4620-04 P001-CF07-01 P4620-05 P001-CF08-01 P4620-06 P001-CF08-01 P4620-07 P001-CF09-01 P4620-08 P001-CF09-01 P4620-09 P001-CF10-01 P4620-10 P001-CF10-01 P4620-11 P001-CF11-01 P4620-12 P001-CF11-01 P4620-13 P001-CF12-01 P4620-14 P001-CF12-01 P4620-15 P001-CF13-01 P001-CF13-01 P4620-16 P4620-17 P001-CF14-01 P4620-18 P001-CF14-01 P001-CF15-01 P4620-19 P4620-20 P001-CF15-01 P4620-22 P001-CF16-01 P4620-23 P4620-22MS P4620-24 P4620-22MSD P4620-25 P001-CF16-01 P4620-26 P4620-25MS P4620-27 P4620-25MSD P4620-29 P001-CF16-02 P4620-30 P001-CF16-02

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. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature :

Date: 11/12/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



# **CASE NARRATIVE**

Weston Solutions, Inc. Project Name: RFP 872 Project # N/A Chemtech Project # P4620 Test Name: SPLP PCB

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

28 Solid samples were received on 10/29/2024.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: EPH, SPLP Extraction and SPLP PCB. This data package contains results for SPLP 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  $\mu$ m; 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  $\mu$ m; Catalogue # 7HM-G017-11.The analysis of SPLP 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. The Retention Times were acceptable for all samples. 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 .

### **E. Additional Comments:**

### F. Calculation for Concentration in Water Samples:

Concentration ug/L = (Ax) (Vt) (DF) (GPC)(CF) (Vo) (Vi)



Where,

- Ax = Response (peak area or height) of the compound to be measured.
- CF = Mean Calibration Factor from the initial calibration (area/ng).
- Vo = Volume of water extracted in mL.
- Vi = Volume of extract injected in uL.
- Vt = Volume of the concentrated extract in uL
- GPC = Vin = GPC factor (If no GPC is performed, GPC=1)

Vout

Vin = Volume of extract loaded onto GPC column.

- Vout = Volume of extract collected after GPC cleanup.
- 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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## **CASE NARRATIVE**

Weston Solutions, Inc. Project Name: RFP 872 Project # N/A Chemtech Project # P4620 Test Name: EPH

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

28 Solid samples were received on 10/29/2024.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: EPH, SPLP Extraction and SPLP PCB. This data package contains results for EPH.

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

The analysis were performed on instrument FID\_C. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224. The analyses were performed on instrument FID\_D. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224. The analysis were performed on instrument FID\_G. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 13302. The analysis were performed on instrument FID\_F. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 13302. The analysis were performed on instrument FID\_F. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 13302. The analysis of EPHs was based on method NJEPH 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 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 Spike Duplicate met requirements for all samples . The Blank analysis did not indicate the presence of lab contamination. The Initial Calibration met the requirements .

#### **E. Additional Comments:**

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



## **F.** Calculation for Concentration in Water Samples:

 $C (ug/L) = \frac{(A) (D) (Ve)}{CF (Vs)}$ 

Where:

C = Concentration of each compound or hydrocarbon range, ug/L

A = Area response of each compound or carbon range to be measured

D = Dilution Factor

Vs = Volume of sample extracted, mL

Ve = Final volume of extract, uL

CF = Calibration factor of each compound or carbon range for each fraction

### G. Calculation for Concentration in Soil Samples:

C (ug/g) = (A) (D) (Ve)CF (S)

Where:

C = Concentration of each compound or hydrocarbon range, ug/g (dry weight basis)

A = Area response of each compound or carbon range to be measured

D = Dilution Factor

Ve = Final volume of extract, uL

CF = Calibration factor of each compound or carbon range for each fraction

S = Dry sample weight, mg

Total EPH concentration = Total of 4 Aromatic Carbon Ranges and 4 Aliphatic Carbon Ranges.

### **H. 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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Signature\_\_\_\_\_



## DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following " Results Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	<ul> <li>Indicates an estimated value. This flag is used:</li> <li>(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)</li> <li>(2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.</li> </ul>
В	Indicates the analyte was found in the blank as well as the sample report as "12 B".
Ε	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
Р	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
Ν	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
Α	This flag indicates that a Tentatively Identified Compound is a suspected aldol- condensation product.
Q	Indicates the LCS did not meet the control limits requirements



#### APPENDIX A

#### **QA REVIEW GENERAL DOCUMENTATION**

Project #: P4620

Completed

For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)	<u> </u>
Check chain-of-custody for proper relinquish/return of samples	<u>✓</u>
Is the chain of custody signed and complete	
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	<u>✓</u>
Collect information for each project id from server. Were all requirements followed	<u>✓</u>
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	<u>✓</u>
Do lab numbers and client Ids on cover page agree with the Chain of Custody	<u>✓</u>
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	<u>✓</u>
Do requested analyses on Chain of Custody agree with the log-in page	<u>✓</u>
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	
Were the samples received within hold time	<u>✓</u>
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	<u> </u>
ANALYTICAL:	
Was method requirement followed?	<u>✓</u>
Was client requirement followed?	<u>✓</u>
Does the case narrative summarize all QC failure?	<u>✓</u>
All runlogs and manual integration are reviewed for requirements	
All manual calculations and /or hand notations verified	<u>✓</u>

QA Review Signature: <u>PRIYANKA DAVE</u>