



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

CASE NARRATIVE

Weston Solutions, Inc.

Project Name: RFP 818

Project # N/A

Chemtech Project # O1829

Test Name: Diesel Range Organics

A. Number of Samples and Date of Receipt:

13 Solid samples were received on 03/07/2023.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Diesel Range Organics, Gasoline Range Organics, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for Diesel Range Organics.

C. Analytical Techniques:

The analysis were performed on instrument FID_E. 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 of Diesel Range Organics was based on method 8015D 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

SS-10-20230306 [Tetracosane-d50 - 0%],

SS-10-20230306MS [Tetracosane-d50 - 0%],

SS-10-20230306MSD [Tetracosane-d50 - 0%] and

SS-11-20230306 [Tetracosane-d50 - 0%].

The Retention Times were acceptable for all samples.

The MS {O1829-11MS} with File ID: FG011537.D recoveries met the requirements for all compounds except for DRO[1068%] due to matrix interference.

The MSD {O1829-12MSD} with File ID: FG011538.D recoveries met the acceptable requirements except for DRO[1470%] due to matrix interference.

The RPD for {O1829-12MSD} with File ID: FG011538.D met criteria except for DRO[31.6%] due to matrix interference.

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 SS-06-20230306, SS-07-20230306, SS-08-20230306 and SS-11-20230306 were diluted due to bad matrices.

Samples SS-03-20230306 and SS-09-20230306 were diluted due to high concentrations.



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E. Additional Comments:

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

Samples SS-06-20230306, SS-07-20230306, SS-08-20230306 and SS-11-20230306 directly analyzed with dilution due to samples are very bad matrix.

Samples SS-03-20230306, SS-06-20230306, SS-07-20230306, SS-08-20230306, SS-09-20230306, SS-10-20230306 and SS-11-20230306 original run reported as screening Data.

SS-10-20230306, SS-10-20230306 MS/12MSD: Recovery and RPD are failed and surrogate peak is not identified due to sample is very bad matrix.

F. Calculation for Concentration in Soil samples:

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

Where,

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

CF = Mean Calibration Factor from the initial calibration.

Vt = Volume of the concentrated extract in uL

Vi = Volume of extract injected (uL).

Ws = Weight of sample extracted (g).

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

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_____