284 Sheffield Street, Mountainside, NJ 7092, Phone: 908 789 8900, Fax: 908 789 8922

CASE NARRATIVE

CDM Smith
Project Name: MWCO CJO WTP Edison 295110
Project # N/A
Order ID # Q3257
Test Name: VOC-TCLVOA-10,SVOC-TCL BNA -20,EPH,Herbicide,PCB,Pesticide-TCL,Mercury,Metals ICP-TAL

A. Number of Samples and Date of Receipt:
2 Solid samples were received on 09/30/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: VOC-TCLVOA-10,SVOC-TCL BNA -20,EPH,Herbicide,PCB,Pesticide-TCL,Mercury,Metals ICP-TAL. This data package contains results for VOC-TCLVOA-10(8260D),SVOC-TCL BNA -20(8270E),EPH(NJEPH),Herbicide(8151A),PCB(8082A),Pesticide-TCL(8081B),Mercury(7471B),Metals ICP-TAL(6010D).

C. Analytical Techniques:
VOC-TCLVOA-10 : The analysis performed on instrument MSVOA_W were done using GC column Rxi-624SIL MS 30m, 0.25mm, 1.4 um, Cat. #13868.The analysis of VOC-TCLVOA-10 was based on method 8260D.

SVOC-TCL BNA -20 : The samples were analyzed on instrument BNA_P using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGA. The analysis of SVOC-TCL BNA -20 was based on method 8270E and extraction was done based on method 3541.

EPH : 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_E. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224.The analysis of EPHs was based on method NJEPH and extraction was done based on method 3541.

Herbicide : The analysis was performed on instrument ECD_S. The front column is RTX-CLPesticides which is 30 meters, 0.32 mm ID, 0. 5 um df,: Catalog # 11139. The rear column is RTX-CLPesticides2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 11324. The analysis of Herbicides was based on method 8151A and extraction was done based on method 3541.

PCB : 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.

Pesticide-TCL : The analysis was performed on instrument ECD_L. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0. 5 um df,: Catalog # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 7HMG017- 11.The analysis of Pesticide-TCLs was based on method 8081B and extraction was done based on method 3541.

Mercury,Metals ICP-TAL : The analysis of Metals ICP-TAL was based on method 6010D, digestion based on method 3050 (soils). The analysis and digestion of Mercury was based on method 7471B.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries were met for all analysis.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds except following
Pesticide-TCL : The MS {Q3257-02MS} with File ID: PL097488.D recoveries met the requirements for all compounds except for [Heptachlor(2) - 61%], [Methoxychlor(2) - 53%] and [Endrin aldehyde(2) - 56%] due to matrix interference.

Mercury,Metals ICP-TAL : The Matrix Spike (SOIL-PILE-1-WCMS) analysis met criteria for all compounds except for Antimony and Silver due to Chemical Interference during Digestion process.

The MSD recoveries met the requirements for all compounds except following
SVOC-TCL BNA -20 : The MSD {Q3257-02MSD} with File ID: BP025909.D recoveries met the requirements for all compounds except for Hexachlorobenzene[120%], due to matrix interference.

Pesticide-TCL : The MSD {Q3257-02MSD} with File ID: PL097489.D recoveries met the requirements for all compounds except for [Heptachlor(2) - 61%], [Methoxychlor(2) - 52%] and [Endrin aldehyde(2) - 53%] due to matrix interference..

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Mercury,Metals ICP-TAL : The Matrix Spike Duplicate (SOIL-PILE-1-WCMSD) analysis met criteria for all compounds except for Antimony, Chromium, Lead and Silver due to Chemical Interference during Digestion process.

The RPD recoveries met criteria.

The Blank Spike met requirements for all compounds except following
VOC-TCLVOA-10 : The Blank Spike for {VW1002SBS01} with File ID: VW032324.D met requirements for all compounds except for Methylene Chloride[134%] is failing high and associate sample having hit of Methylene Chloride but below CRQL therefore no corrective action taken.

SVOC-TCL BNA -20 : The Blank Spike for {PB169936BS} with File ID: BP025903.D met requirements for all compounds except for 1,1-Biphenyl[112%], 1,2,4,5-Tetrachlorobenzene[124%], 2,4,5-Trichlorophenol[106%], 2,4,6-Trichlorophenol[106%], 2-Chloronaphthalene[100%], 4-Bromophenyl-phenylether[106%], 4-Chlorophenyl-phenylether[100%], Acetophenone[106%], Hexachlorobenzene[106%], Hexachlorobutadiene[106%] and N-Nitrosodiphenylamine[106%], The associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Blank Spike Duplicate met requirements for all compounds
The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements except following
VOC-TCLVOA-10 : The %RSD is greater than 20% in the Initial Calibration method (82W100125S.M) for Methylene chloride passing on Linear regression.

SVOC-TCL BNA -20 : The %RSD is greater than 20% in the Initial Calibration (Method 8270-BP091225.M) for 2,4-Dinitrophenol & 4-Nitrophenol. These Compounds are passing on Linear regression.

The Continuous Calibration met the requirements except following
SVOC-TCL BNA -20 : The Continuous Calibration File ID BP025901.D met the requirements except for Benzaldehyde, The associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Tuning criteria met requirements.

The Duplicate analysis met criteria for all compoundsexcept following
Mercury,Metals ICP-TAL : The Duplicate (SOIL-PILE-1-WCMSD) analysis met criteria for all compounds except for Chromium and Iron due to Chemical Interference during Digestion Process.

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The Serial Dilution met the acceptable requirements.

E. Additional Comments:
The soil samples results are based on a dry weight basis.

SVOC-TCL BNA -20 : The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

Mercury,Metals ICP-TAL : Sample Q3257-01 and Q3257-02 - Silver parameter is Oversaturated , so Report from 5X Dilutions.
The Post Digest Spike (SOIL-PILE-1-WCA) analysis met criteria for all compounds except for Silver due to unknown chemical interference of matrix with the addition of spike amount after digestion and before analysis; matrix has suppression effect during addition of spike.

VOC-TCLVOA-10 : Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

Trip Blank was not provided with this set of samples.

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_____