



## CASE NARRATIVE

**CDM Smith** 

**Project Name: South River WM Replacement** 

Project # N/A Order ID # Q2032

**Test Name: SVOC-TCL BNA -20** 

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

9 Solid samples were received on 05/13/2025.

2 Water samples were received on 05/13/2025.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Herbicide, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL, VOC-TCLVOA-10 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 dfThe 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-GGAThe analysis of SVOC-TCL BNA -20 was based on method 8270E and extraction was done based on method 3510.

# D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

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.

The MSD recoveries met the acceptable requirements.

The RPD for {Q2032-06MSD} with File ID: BP024692.D met criteria except for 2,3,4,6-Tetrachlorophenol[21%], 2,4-Dinitrophenol[25%], 2,4-Dinitrotoluene[21%], 3-

Nitroaniline[25%], 4-Chloro-3-methylphenol[21%], 4-Nitroaniline[35%], 4-

Nitrophenol[37%], Caprolactam[33%], Diethylphthalate[22%] and Fluoranthene[21%] due to difference in MS and MSD concentrations.

The RPD for {PB168048BSD} with File ID: BP024708.D met criteria except for 3,3-Dichlorobenzidine[22%], 3-Nitroaniline[34%] and 4-Chloroaniline[57%] due to difference in BS and BSD concentrations.





The Blank Spike for {PB168041BS} with File ID: BP024689.D met requirements for all samples except for Caprolactam[65%]. But associated samples have not positive hit for these compounds therefore no corrective action was taken.

The Blank Spike Duplicate met requirements for all samples.

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

The % RSD is greater than 20% in the Initial Calibration (8270-BF050525.M) for 2-Nitrophenol, 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Butylbenzlphthalate, Bis(2-ethylhexyl)phthalate, Di-n-octyl phthalate, these compound are passing on Linear Regression.

The % RSD is greater than 20% in the Initial Calibration (8270-BP051325.M) for 2,4-Dinitrophenol, 4-Nitrophenol, these compound are passing on Linear Regression.

The Continuous Calibration File ID BF142441.D met the requirements except for 2,4-Dinitrophenol,2,4-Dinitrotoluene,2,6-Dinitrotoluene,2-Nitroaniline,2-Nitrophenol,3,3-Dichlorobenzidine,4,6-Dinitro-2-methylphenol,4-Nitroaniline,4-Nitrophenol,and Pentachlorophenol . But associated samples have not positive hit for these compounds therefore no corrective action was taken.

The Continuous Calibration File ID BP024686.D met the requirements except for Hexachlorocyclopentadiene. But associated samples have not positive hit for these compounds therefore no corrective action was taken. The Tuning criteria met requirements.

#### E. Additional Comments:

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

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	
Signature	



