



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

## **CASE NARRATIVE**

**First Environment, Inc.**

**Project Name: USACE018-44 DOD**

**Project # N/A**

**Order ID # Q2819**

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

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

20 Solid samples were received on 08/08/2025.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: SVOC-TCL BNA -20. 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\_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.

### **D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries were met for all analysis except for 22BP-E [Terphenyl-d14 - 52%], 11M-S [Terphenyl-d14 - 48%], 11M-N [Terphenyl-d14 - 50%], 84SB-E [Terphenyl-d14 - 51%], 84SB-W [Terphenyl-d14 - 37%], 17M-S [Terphenyl-d14 - 52%], 17M-E [Terphenyl-d14 - 40%], 17M-W [Terphenyl-d14 - 51%] and 17M-N [Terphenyl-d14 - 47%] as per method one surrogate is allowed to failed, therefore no corrective action was taken also 22BP-S [2-Fluorobiphenyl - 37%, Terphenyl-d14 - 35%], 22BP-SRE [2,4,6-Tribromophenol - 38%, Terphenyl-d14 - 32%], 84SB-S [2,4,6-Tribromophenol - 34%, 2-Fluorobiphenyl - 34%, Nitrobenzene-d5 - 36%, Terphenyl-d14 - 31%], 84SB-SRE [2,4,6-Tribromophenol - 32%, 2-Fluorobiphenyl - 43%, Terphenyl-d14 - 33%] All the failure samples in surrogates were reanalyzed to confirm the results as per method and reported in the data.

The Internal Standards Areas were met for all analysis.

The Retention Times were met for all analysis.

The MS recoveries met the requirements for all compounds.

The MSD recoveries met the requirements for all compounds.

The RPD for {Q2819-17MSD} with File ID: BP025521.D met criteria except for 4-Chloroaniline[21%] due to difference in results of MS and MSD.

The Blank Spike for {PB169242BS} with File ID: BP025489.D met requirements for all compounds except for 1,4-Dioxane[65%] is failing marginally low therefore no corrective action taken.

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

The %RSD is greater than 20% in the Initial Calibration (Method 8270-BF082025.M) for Hexachlorocyclopentadiene, 2,4-Dinitrophenol these Compounds are passing on Linear regression.

The Continuous Calibration File ID BF143539.D met the requirements except for Pentachlorophenol but no positive hit in associated sample therefore no corrective action taken.

The Continuous Calibration File ID BP025487.D met the requirements except for 2,4-Dinitrophenol and 4,6-Dinitro-2-methylphenol but no positive hit in associated sample therefore no corrective action taken.

The Continuous Calibration File ID BP025528.D met the requirements except for Benzaldehyde but no positive hit in associated samples therefore no corrective action taken.

The Tuning criteria met requirements.

Samples 38M-S was diluted due to dirty matrix.

**E. Additional Comments:**

The Form 6 is not included in the data package because the Initial Calibration was performed using 8 points.

The not QT review data is reported in the Miscellaneous.

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.



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

---

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\_\_\_\_\_