

CASE NARRATIVE

First Environment, Inc.

Project Name: USACE018-44 DOD

Project # N/A

Order ID # Q2814

Test Name: SVOC-TCL BNA -20

A. Number of Samples and Date of Receipt:

23 Water samples were received on 08/08/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Dissolved ICP-TAL Metals, Dissolved Mercury, DISSOLVED METALS-TAL, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SVOC-TCL BNA -20 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 df The samples were analyzed on instrument BNA_P using GC Column ZB-Semi Volatiles 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 except for TW-BP-S, TW-BP-N, TW-BP-E, TW-BP-W, FB, TW-BP-S, TW-BP-N, TW-BP-E, TW-BP-W and FB, Extraction out of hold due to receive late.

The Surrogate recoveries met the acceptable criteria except for TW-82H-E [2-Fluorobiphenyl - 40%, Terphenyl-d14 - 44%], TW-82H-ERE [2,4,6-Tribromophenol - 36%, 2-Fluorobiphenyl - 31%, Nitrobenzene-d5 - 35%, Terphenyl-d14 - 33%], TW-82H-S [Terphenyl-d14 - 48%], TW-518R-N [2-Fluorobiphenyl - 43%, Terphenyl-d14 - 45%], TW-518R-NRE [2-Fluorobiphenyl - 43%, Failure sample for surrogate was reanalyzed to confirm the failure and both run were reported in Hard Copy, and Terphenyl-d14 - 43%], as per method one acid and one base surrogate allow to fail therefore no corrective action taken.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD for {PB169223BSD} with File ID: BF143501.D met criteria except for 3,3-Dichlorobenzidine[25%], 4-Chloroaniline[46%], due to difference in results of BS and BSD.

The Blank Spike for {PB169223BS} with File ID: BF143500.D met requirements for all samples except for 1,4-Dioxane[68%], The associate samples have no positive hit for this compound 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% for certain compounds in the Initial Calibration (Method 8270-BF081225.M) for 2-Nitrophenol, Hexachlorocyclopentadiene, 2-Nitroaniline, 2,6-Dinitrotoluene, 4-Nitrophenol, 2,4-Dinitrotoluene, 4,6-Dinitro-2-methylephenol, Pentachlorophenol, Butylbenzylphthalate, Bis(2-ethylhexylephthalate), Di-n-octyl phthalate, These Compounds is passing on Linear Regression . 2,4-Dinitrophenol is passing on Quadratic Regression.

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

The Continuous Calibration File ID BF143377.D met the requirements except for Bis(2-ethylhexyl)phthalate and Butylbenzylphthalate, The associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Continuous Calibration File ID BF143397.D met the requirements except for Bis(2-ethylhexyl)phthalate,. The associate samples have no positive hit for these compounds therefore no corrective action was taken

The Continuous Calibration File ID BF143539.D met the requirements except for Pentachlorophenol, The associate samples have no positive hit for these compounds therefore no corrective action was taken

The Continuous Calibration File ID BP025422.D met the requirements except for Benzaldehyde The associate compound are not required for the samples under the sequences, therefore no corrective action was taken.

The Tuning criteria met requirements.

E. Additional Comments:

The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

The not QT review data is reported in the Miscellaneous.

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



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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_____