



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

## **CASE NARRATIVE**

**JACOBS Engineering Group, Inc.**

**Project Name: Former Schlumberger Site Princeton NJ**

**Project # N/A**

**Chemtech Project # P3671**

**Test Name: SVOCMS Group5**

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

14 Solid samples were received on 08/19/2024.

1 Water sample was received on 08/19/2024.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Hexavalent Chromium, Mercury, Metals Group4, SVOCMS Group3, SVOCMS Group5, TOC, VOCMS Group 4, VOCMS Group3, VOCMS Group5 and VOCMS Group6. This data package contains results for SVOCMS Group5.

### **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\_M using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GG. 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-GG. The analysis of SVOCMS Group5 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 met the acceptable criteria except for S-903-J-SO-0-0.5-081924 [2,4,6-Tribromophenol - 29%, Terphenyl-d14 - 22%], these compounds did not meet the NJDKQP criteria but met the in-house criteria. While 2-Fluorobiphenyl - 18%, this compound did not meet the NJDKQP criteria and in-house criteria, and as per method two surrogates are allowed to fail, no corrective action was taken.

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 met criteria.

The Blank Spike met requirements for all samples.

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



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The % RSD is greater than 20% in the Initial Calibration method (Method 8270-BF082024.M) for Benzo(g,h,i)perylene, this compound is passing on Linear Regression.

The % RSD is greater than 15% in the Initial Calibration (Method 8270-BM081024.M) for Benzaldehyde, this compound is passing on Quadratic regression.

The Continuous Calibration File ID BF139113.D met the requirements except for Nitrobenzene-d5, The associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Continuous Calibration File ID BF139159.D met the requirements except for Dibenzo(a,h)anthracene, Nitrobenzene and Nitrobenzene-d5, Under this Continuous Calibration Lab has analyzed only dilution samples, and this compound does not required dilution so no further corrective action taken.

The Continuous Calibration File ID BP021607.D met the requirements except for Pentachlorophenol and 2,4,6-Tribromophenol, The associate samples have no positive hit for these compounds therefore no corrective action was taken.  
The Tuning criteria met requirements.

Sample S-904-J-SO-0-0.5-081924 was diluted due to high concentration.

**E. Additional Comments:**

This data Package has been revised to change Client ID as per client request.  
The Sample S-904-J-SO-0-0.5-081924DL, S-904-J-SO-0.5-1.0-081924, S-911-K1-SO-0.5-1-081924, S-911-KI-SO-0-0.5-081924-FD, S-905-J-SO-0.5-1.0-081924, have the concentration of target compound below method detection limits; therefore it is not reported as Hit in Form1.

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

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 <15% 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 > 15% 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.



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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\_\_\_\_\_